BC Centre for Disease Control

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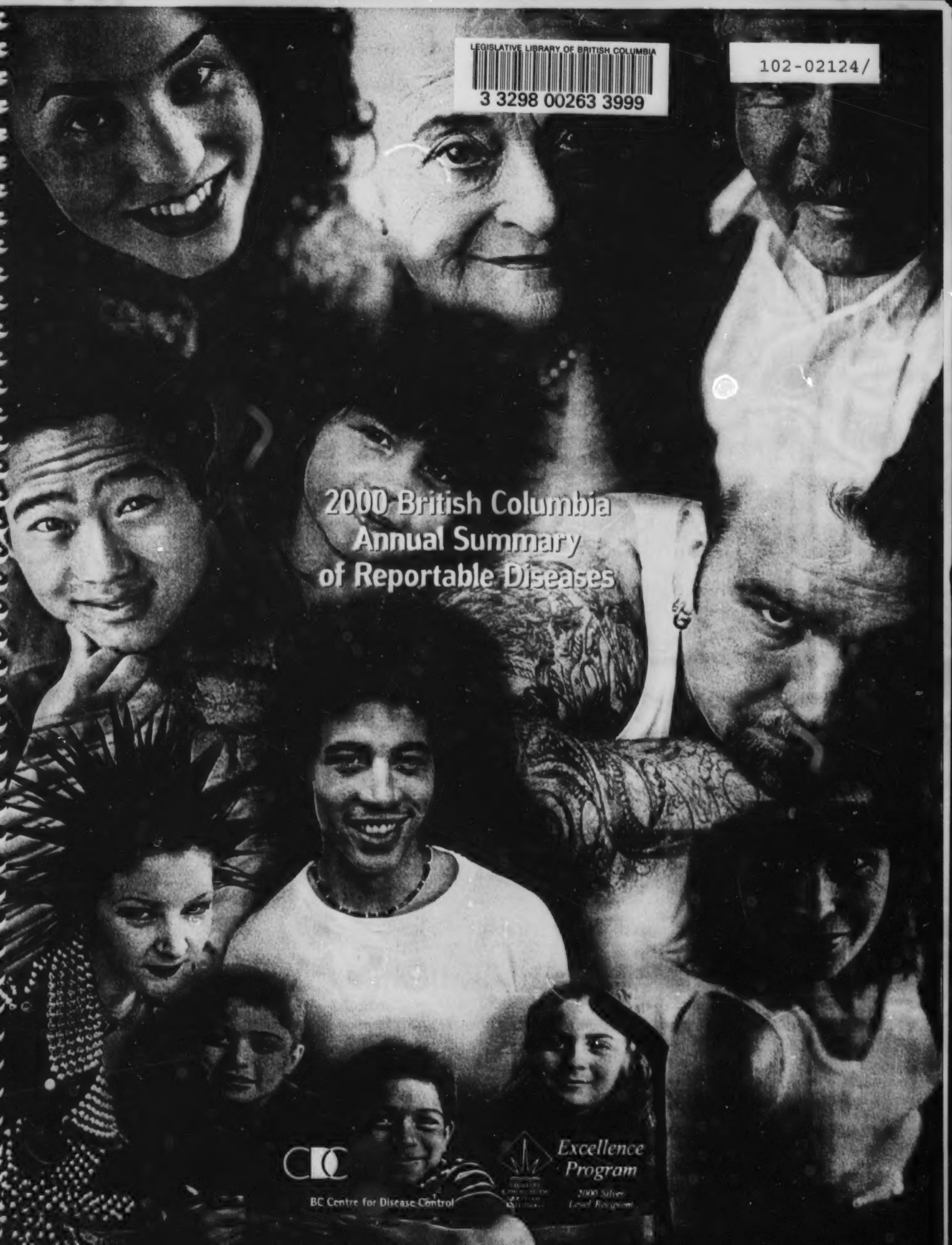

2000 British Columbia Annual Summary of Reportable Diseases

BC Centre for Disease Control

Quality Council of British Columbia

Excellence Program

2000 Silver Level Recipient

CDC

BC Centre for Disease Control

BC Centre for Disease Control

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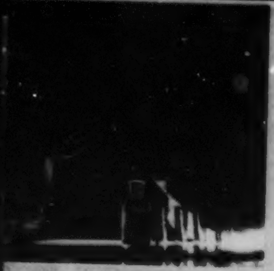


Executive Summary

Diseases Preventable by Routine Vaccination • **Invasive *Haemophilus influenzae* type b (Hib)** disease was reported 7 times during 2000 continuing the trend of dramatic decline since the introduction of the Hib vaccine.

The rate of **acute hepatitis B** also appears to be declining in the general population to a rate approximately half that seen in the early to mid 1990's. This is also well explained by the routine grade six immunization program – it is particularly noteworthy that only 3 cases of acute hepatitis B were reported among those aged 10-19 during 2000.

In British Columbia, and indeed throughout the Northern Hemisphere, **influenza** activity was mild during the 2000-2001 season. Some areas described this winter season as providing the mildest influenza activity in 10 years and, in BC, this was demonstrated in mortality statistics related to pneumonia and influenza. Efforts to improve immunization coverage amongst high risk groups and health care workers continues to be an important goal in reducing unnecessary morbidity and mortality.

There has been great success in **measles** control since routine vaccination was introduced and this continued through 2000. In fact, an outbreak amongst a community of unimmunized persons resulted in 38 of the 42 reports in BC this year. Three of the remaining four cases were acquired while outside of Canada and they were also unimmunized.

The low rate of **mumps** activity since the outbreak in 1997 has persisted with only 17 cases reported. These have been primarily linked to imported disease affecting small unimmunized groups.

Pertussis demonstrates 4 to 6 year cyclical peaks. The last outbreak occurred in 1996 and an outbreak arrived on schedule during 2000 reaching a rate of 44.4 per 100,000 provincially with pockets of even more intense activity. This outbreak demonstrated a unique age distribution and seasonality with pre-teens and teens predominantly affected and activity rising in spring rather than the typical late summer or fall.

Two cases of **rubella** were reported in British Columbia during 2000 involving children 1-9 years of age. This low rate of reporting continues a trend of only sporadic cases since 1997 in BC. Immunization can be credited with bringing rubella to the brink of elimination and for the continued absence of the tragedy of congenital rubella syndrome.

BC Centre for Disease Control

Sexually Transmitted Disease and Blood Borne Pathogens • The BC rate of newly reported **AIDS** cases at 2.1 per 100,000 population continued the decline from previous years. Vancouver/Richmond and the Coast Garibaldi Health Regions had rates above the provincial average.

The rate of reported genital **chlamydia** infection increased 14.4% in 2000 to 152.3 per 100,000 population from 133.1 in 1999. This increase is slightly less than the 11.8% increase in the previous year. Over 50% of all reported cases of chlamydia genital infection occurred in 15-24 year old females. Males 20-29 years old accounted for 50% of male cases.

The **gonorrhea** rate for BC decreased by 17% from 21.8 to 17.8 per 100,000 population between 1999 and 2000. Only Coast Garibaldi and Thompson Health Regions saw gonorrhea increases in 2000.

The rate of new reporting of antibody to **hepatitis C** has been declining in British Columbia since its peak in 1997 and this continued in the year 2000. This is likely explained by an early surge in identification following initial availability of serologic tests.

The rate of new positive tests for **HIV** was 10.2 per 100,000 population in 2000. This rate has been declining steadily since it was 22.8 in 1994.

The outbreak of infectious **syphilis** continued through 2000 in the Lower Mainland, especially Vancouver's Downtown Eastside. The overall provincial rate decreased to 2.4 per 100,000 population in 2000, from 3.2 in 1999 and 2.8 in 1998.

Diseases Transmitted by Direct Contact and Respiratory Routes • The rate of **invasive group A streptococcal disease** during 2000 was constant compared to 1999. The 57 invasive cases were distributed broadly across age and gender and about one third represented necrotising fasciitis.

Leprosy continues to be an uncommon diagnosis in British Columbia. One newly diagnosed case was reported during 2000 with a larger case load of chronically infected persons likely being followed in tropical medicine clinics.

Twenty-four cases of **meningococcal disease** were reported in British Columbia – a crude incidence rate of 0.6 per 100,000 which is below the historic BC average and continues to closely track the overall Canadian rate. All reported cases were random, with no clusters, outbreaks or secondary cases reported in 2000. However, a case in late December 2000 in the Fraser Valley was likely the first in a cluster later identified in that region during 2001.

An increase in reporting of invasive **pneumococcal disease** (IPD) in British Columbia in 2000 (from 5 to 93 cases in 1999 and 2000 respectively) is attributable to a change in reporting requirements. All invasive pneumococcal disease was made reportable in BC and nationally during 2000 where previously, only pneumococcal meningitis was reportable. The highest rates of IPD were seen in infants aged less than one year highlighting the need for better prevention in this age group.

In 2000 there were 290 cases of active **tuberculosis** reported in BC – a 13% reduction compared to 1999 and a further reduction from 1998. Nevertheless, the BC rate continues to be higher than the national rate of 5.9 per 100,000 as reported in 1998 and 1999.

The BCCDC is currently working with laboratories in British Columbia to craft a more meaningful system of surveillance for antibiotic resistant bacteria such as **MRSA** and **VRE**. It is hoped that this will allow fuller monitoring and reporting of this important and emerging problem.

Executive Summary

Enteric, Food and Water Borne Diseases • Both **giardiasis** and **cryptosporidiosis** reporting have fallen considerably since peaks earlier in the 1990s. No protozoal waterborne outbreaks were identified in 2000 in BC. Reporting of **amebiasis** showed a slight decline in 2000.

One case of **botulism**, in the North West Health Region, was reported in 2000. Seven cases of **Cyclosporiasis** were reported in 2000. Six cases of **listeriosis** were reported in 2000. There were no cases reported for **trichinosis** in 2000. Ten cases of **typhoid fever** were reported in 2000.

Verotoxigenic E. coli reporting fell in 2000, while both **campylobacteriosis** and **salmonellosis** have remained stable in recent years. An outbreak of 52 cases of *Salmonella enteritidis* infection was related to baked goods produced by a Richmond bakery. **Shigellosis** reporting rose slightly in 2000. Two shigellosis outbreaks, one related to a food-service establishment and second among men who have sex with men (MSM) were identified. **Vibriosis** reporting has fallen while **yersiniosis** has shown a slight upward trend in recent years.

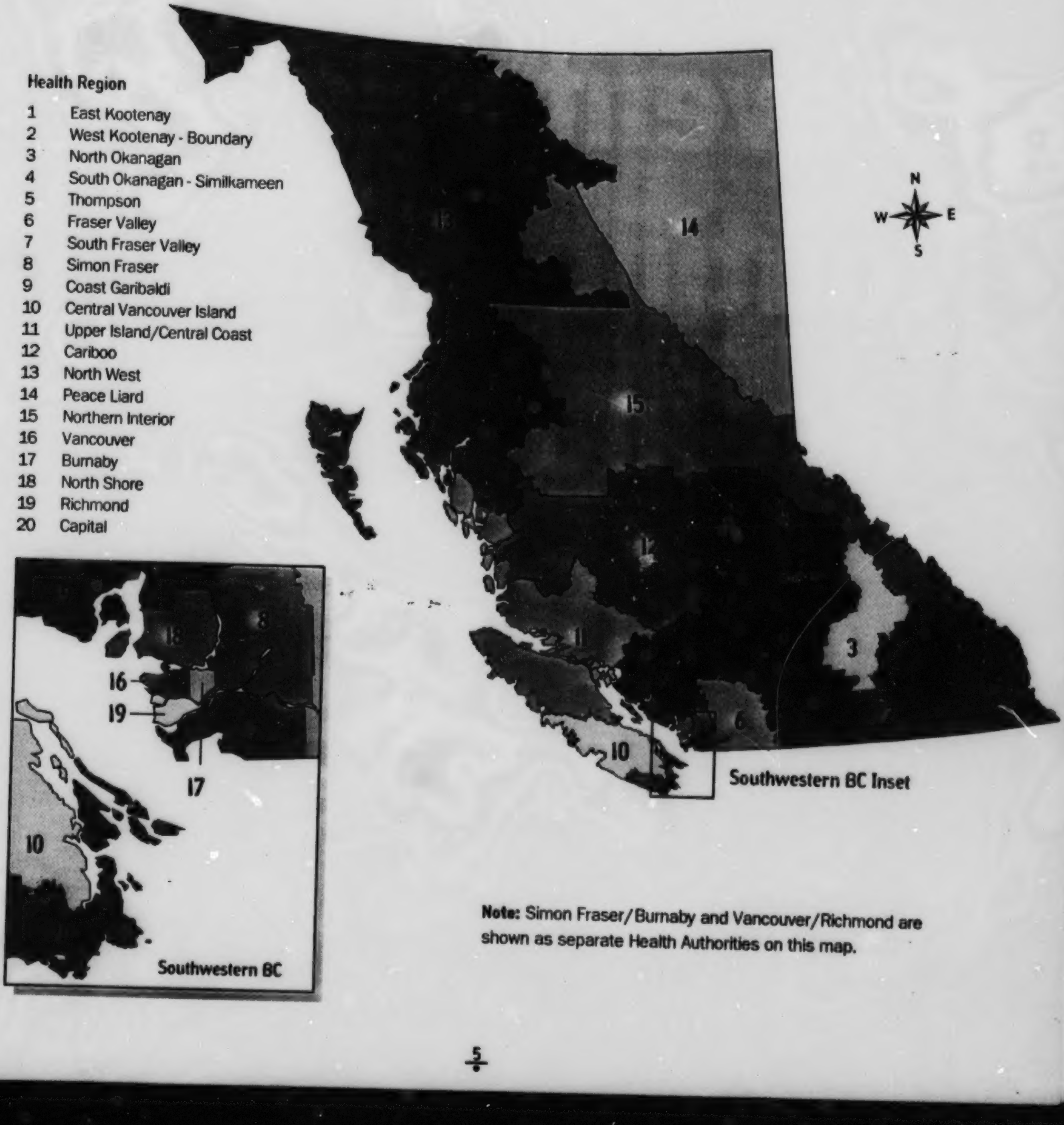
In 2000, **hepatitis A** reporting fell to its lowest level in over a decade. Much of this decline can be attributed to immunization of high risk groups including injection drug users and MSM in Vancouver. An outbreak occurred among children in the Cariboo Health Region, and this was successfully controlled using hepatitis A vaccine.

Vectorborne and Other Zoonotic Diseases • There were no **hantavirus pulmonary syndrome** cases reported in 2000.

Twelve cases of **Lyme disease** were reported in 2000. Six of the twelve had exposures to Lyme endemic areas outside of BC.

Malaria reporting has remained low for the past 3 years following a peak in the years 1995 through 1997. In 2000, thirty-three cases were reported for a rate of 0.8 cases per 100,000 population.

BC Map by Health Region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Southwestern BC Inset
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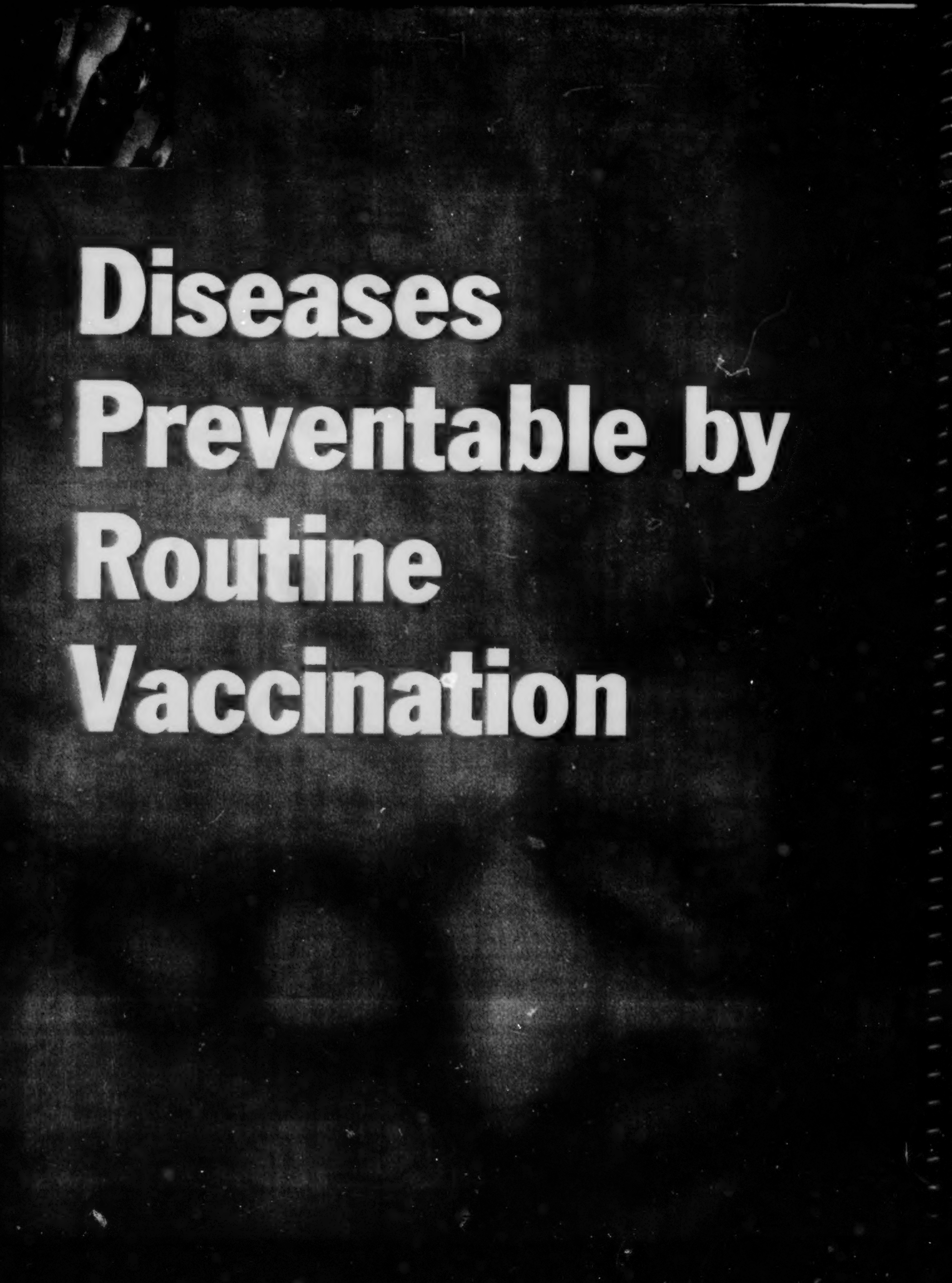
17
10
Southwestern BC

Health Region

1	East Kootenay
2	West Kootenay - Boundary
3	North Okanagan
4	South Okanagan - Similkameen
5	Thompson
6	Fraser Valley
7	South Fraser Valley
8	Simon Fraser
9	Coast Garibaldi
10	Central Vancouver Island
11	Upper Island/Central Coast
12	Cariboo
13	North West
14	Peace Liard
15	Northern Interior
16	Vancouver
17	Burnaby
18	North Shore
19	Richmond
20	Capital

Note: Simon Fraser/Burnaby and Vancouver/Richmond are shown as separate Health Authorities on this map.



Diseases Preventable by Routine Vaccination

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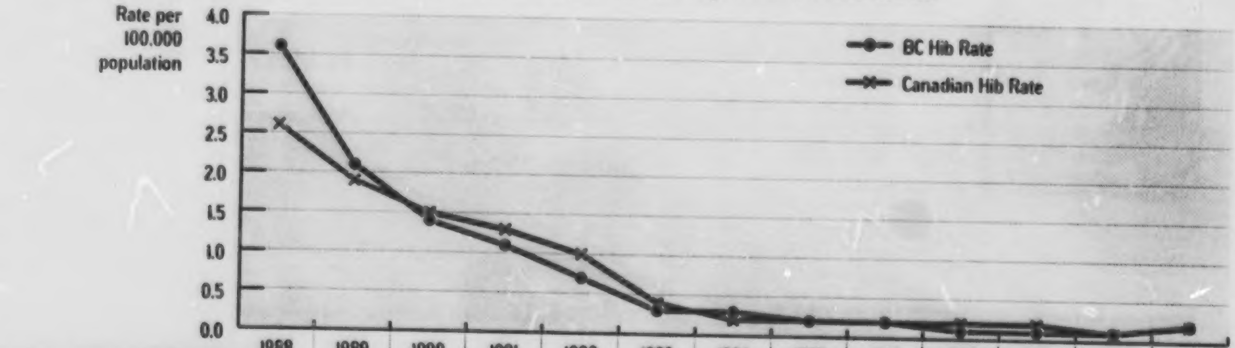
Invasive *Haemophilus influenzae* type b (Hib)

The rate of invasive *Haemophilus influenzae* type b infection has declined dramatically in British Columbia since the introduction of the Hib vaccine. There were 7 cases of Hib reported during the year 2000 for a rate of 0.2 per 100,000 population.

Invasive *Haemophilus influenzae* type b (Hib) Rates by Year, 1988-2000

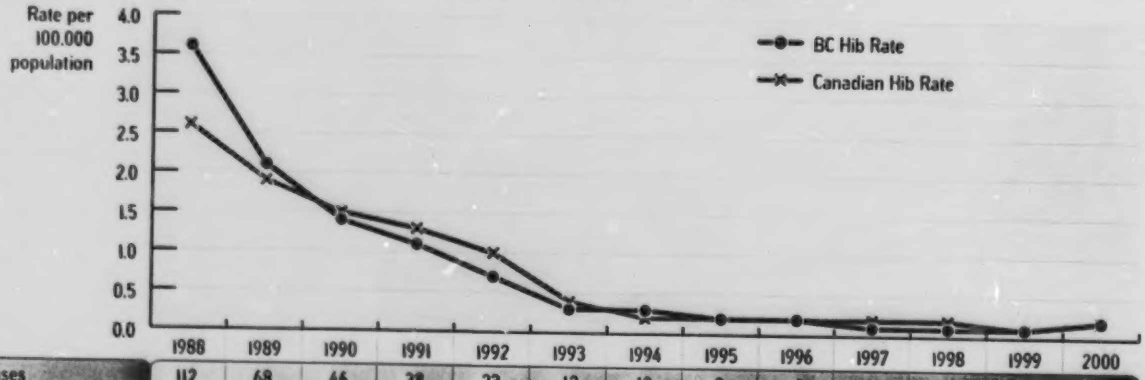


	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Hib Cases	112	68	46	38	23	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Hib Rate	3.6	2.1	1.4	1.1	0.7	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2
Canadian Hib Rate	2.6	1.9	1.5	1.3	1.0	0.4	0.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Invasive *Haemophilus influenzae* type b (Hib)

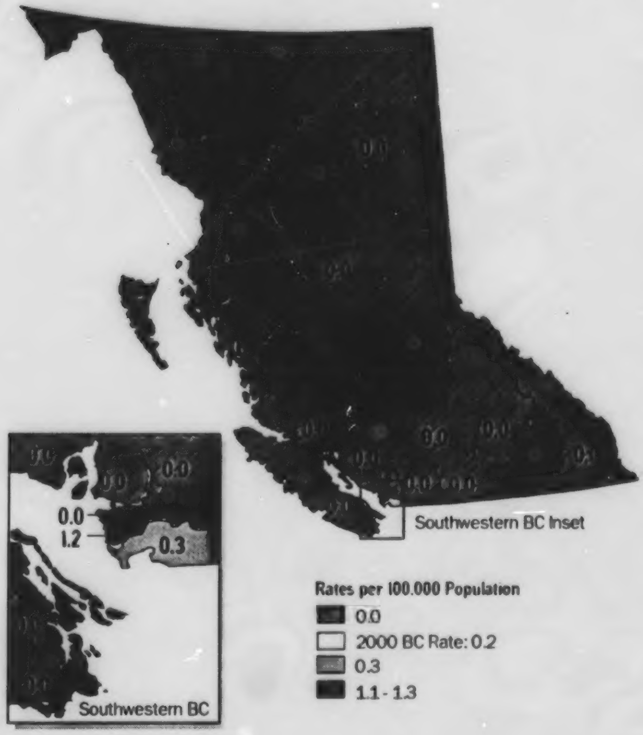
The rate of invasive *Haemophilus influenzae* type b infection has declined dramatically in British Columbia since the introduction of the Hib vaccine. There were 7 cases of Hib reported during the year 2000 for a rate of 0.2 per 100,000 population.

Invasive *Haemophilus influenzae* type b (Hib) Rates by Year, 1988-2000



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Hib Cases	112	68	46	38	23	12	12	9	9	4	3	4	[illegible]
BC Hib Rate	3.6	2.1	1.4	1.1	0.7	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.2
Canadian Hib Rate	2.6	1.9	1.5	1.3	1.0	0.4	0.2	0.2	0.2	0.2	0.2	0.1	[illegible]

Invasive *Haemophilus influenzae* type b (Hib) Rates by Health Region, 2000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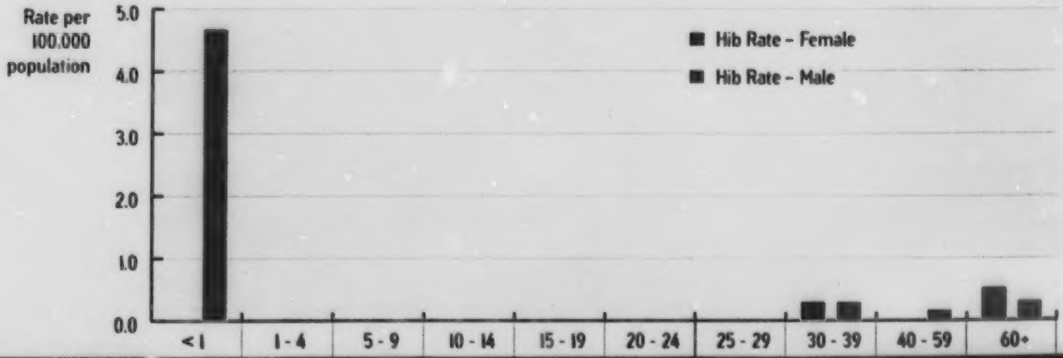
0.0
1.2
0.3
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
2000 BC Rate: 0.2
0.3
1.1 - 1.3

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	2	0.3
8	Simon Fraser	0	0.0
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	1	1.3
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	0	0.0
18	North Shore	0	0.0
19	Richmond	2	1.2
20	Capital	0	0.0

Invasive *Haemophilus influenzae* type b (Hib) Rates by Age Group and Sex, 2000



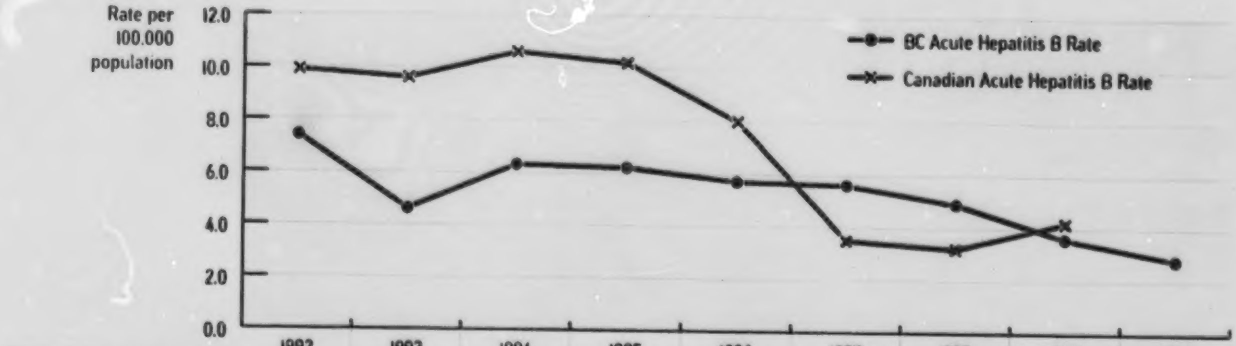
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Hib Cases - Female	0	0	0	0	0	0	0	1	[illegible]	[illegible]	[illegible]
Hib Cases - Male	1	0	0	0	0	0	0	1	1	1	4
Hib Rate - Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	[illegible]	[illegible]	[illegible]
Hib Rate - Male	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.3	0.2

Hepatitis B

The rate of acute hepatitis B appears to be declining in the overall population of British Columbia and reached 2.8 per 100,000 population in the year 2000. This is approximately half the rate seen in the early to mid 1990's. The review of age specific declines in the rate of acute hepatitis B indicates a clear decline in the rate of reporting for those aged 10-19. This is well explained by the routine grade six immunization program and it is notable that only three cases of acute hepatitis B disease were reported among those aged 10-19 during the year 2000. By contrast, the rate of identification of hepatitis B carriers has not significantly declined in recent years.

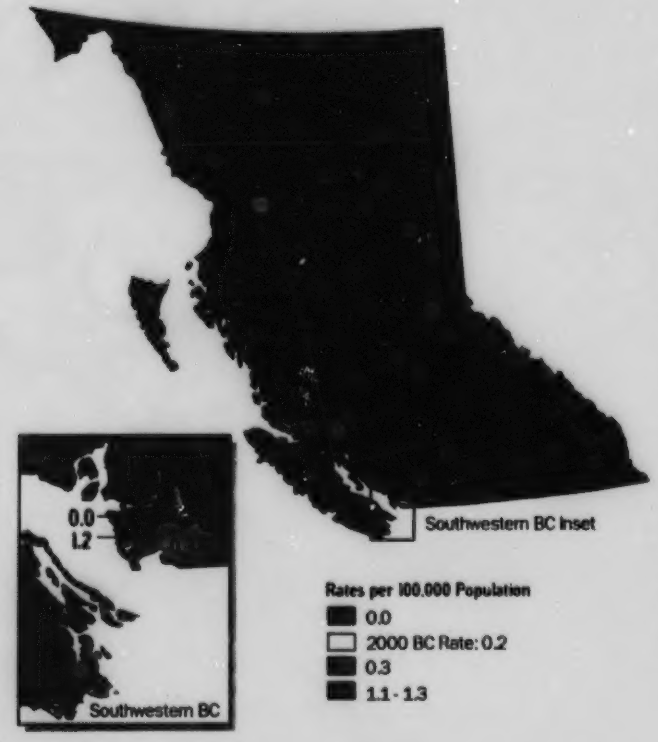
Regions of British Columbia with rates of acute hepatitis B above the provincial median in the year 2000 included the East Kootenay region, the Upper Island region, and the City of Vancouver.

Acute Hepatitis B Rates by Year, 1992-2000



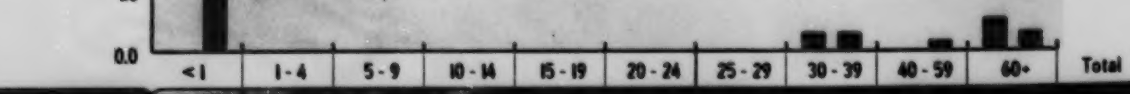
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Acute Hepatitis B Cases	256	165	233	233	223	222	[illegible]	[illegible]	112
BC Acute Hepatitis B Rate	7.4	4.6	6.3	6.2	5.7	5.6	4.9	3.6	2.8
Can. Acute Hepatitis B Rate	9.9	9.6	10.6	10.2	8.0	3.5	3.2	4.2	

Invasive *Haemophilus influenzae* type b (Hib) Rates by Health Region, 2000


0.0
1.2
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
■ 0.0
☐ 2000 BC Rate: 0.2
■ 0.3
■ 1.1 - 1.3

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	2	0.3
8	Simon Fraser	0	0.0
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	1	1.3
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	0	0.0
18	North Shore	0	0.0
19	Richmond	2	1.2
20	Capital	0	0.0

Invasive *Haemophilus influenzae* type b (Hib) Rates by Age Group and Sex, 2000



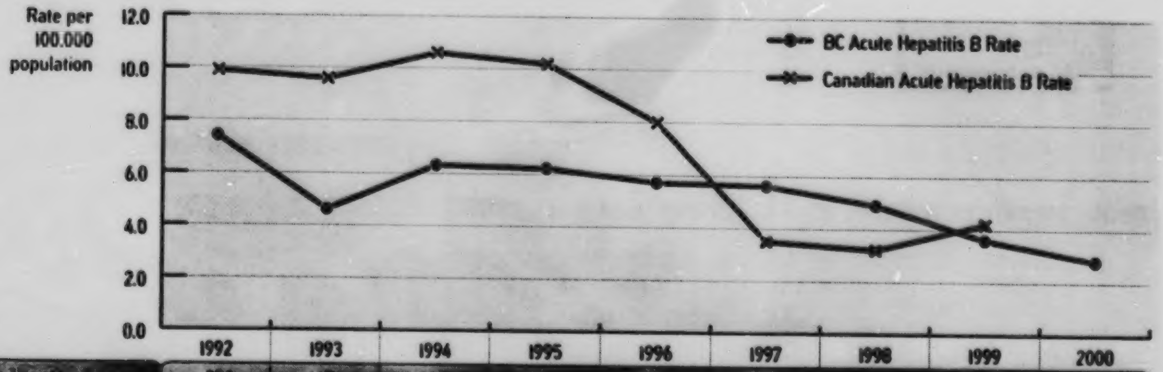
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hib Cases – Male	1	0	0	0	0	0	0	1	[illegible]	[illegible]	[illegible]
[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hib Rate – Male	4.7	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]

Hepatitis B

The rate of acute hepatitis B appears to be declining in the overall population of British Columbia and reached 2.8 per 100,000 population in the year 2000. This is approximately half the rate seen in the early to mid 1990's. The review of age specific declines in the rate of acute hepatitis B indicates a clear decline in the rate of reporting for those aged 10-19. This is well explained by the routine grade six immunization program and it is notable that only three cases of acute hepatitis B disease were reported among those aged 10-19 during the year 2000. By contrast, the rate of identification of hepatitis B carriers has not significantly declined in recent years.

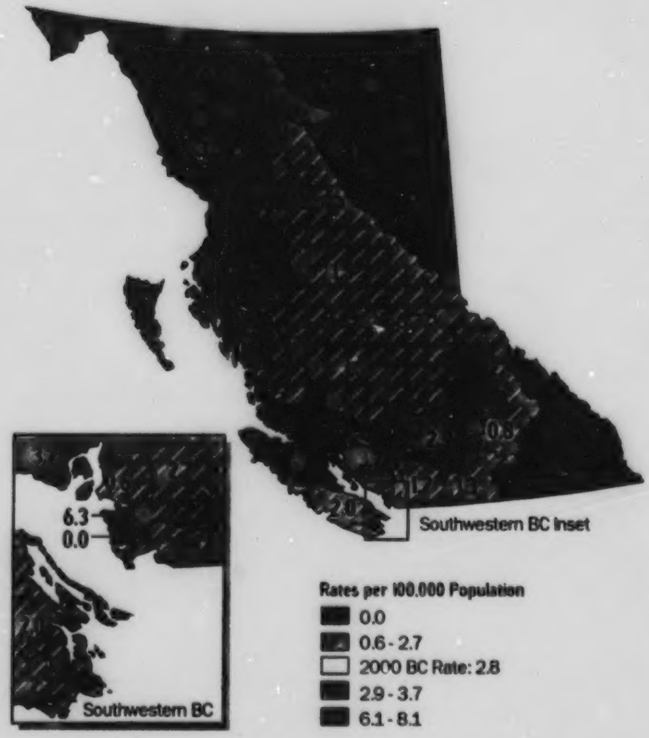
Regions of British Columbia with rates of acute hepatitis B above the provincial median in the year 2000 included the East Kootenay region, the Upper Island region, and the City of Vancouver.

Acute Hepatitis B Rates by Year, 1992-2000



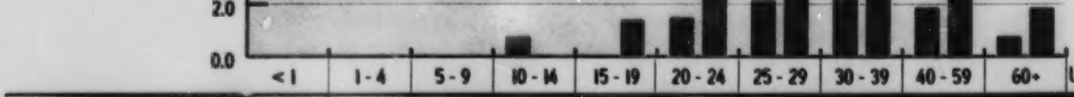
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Acute Hepatitis B Ca[illegible]	256	[illegible]	231	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Acute Hepatitis B Rate	7.4	4.6	6.3	6.2	5.7	5.6	4.9	3.6	2.8
Can. Acute Hepatitis B R[illegible]	9.9	9.6	10.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Acute Hepatitis B Rates by Health Region, 2000


6.3
0.0
2.0
0.8
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0
0.6 - 2.7
2000 BC Rate: 2.8
2.9 - 3.7
6.1 - 8.1

HR	Health Region	Cases	Rate
1	East Kootenay	5	6.1
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	3	1.3
5	Thompson	4	2.9
6	Fraser Valley	3	1.2
7	South Fraser Valley	12	2.1
8	Simon Fraser	14	2.7
9	Coast Garibaldi	3	3.7
10	Central Vancouver Island	5	2.0
11	Upper Island/Central Coast	10	8.1
12	Cariboo	1	1.3
13	North West	3	3.3
14	Peace Liard	0	0.0
15	Northern Interior	2	1.5
16	Vancouver	36	6.3
18	North Shore	1	0.6
19	Richmond	0	0.0
20	Capital	9	2.7

Acute Hepatitis B Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Acute He[illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acute Hepatitis B Cases - Male	0	0	0	0	2	6	16	24	29	[illegible]	[illegible]	[illegible]
Acute Hepatitis [illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Acute Hepatitis B R[illegible] - Male	0.0	0.0	0.0	0.0	1.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

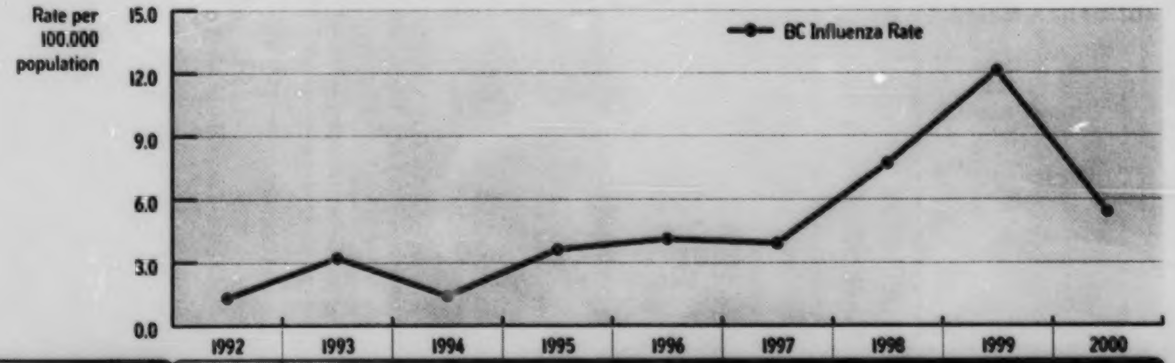
Influenza

The rate of influenza in British Columbia reached 5.4 per 100,000 population during 2000 compared with 12.1 in 1999. This decrease is explained by the relatively mild influenza season experienced in British Columbia and worldwide during the 2000-2001 winter season. The mild season is attributed to the predominance of influenza type B viruses. The highest age specific rates were experienced by infants less than 1 year of age in whom it exceeded 30.0 per 100,000 population and by those 60 years of age and above. For the latter age group, female rates were reported at over 17.6 per 100,000 population and male rates reported at 9.5 per 100,000 population. Influenza reports were received from all regions of the province. However, inter-regional comparisons may not be valid because of differences in the rate of laboratory confirmation and in the distribution of sentinel physicians from whom many of the reports were received.

Influenza like illness is tracked by a network of family physicians across British Columbia. Peak activity during December 2000 did not exceed historic numbers and reached 2.5% of all visits to sentinel physicians.

Influenza remains one of the major causes of vaccine preventable morbidity and is a major contributor to hospitalizations and premature death in British Columbia. Control efforts must increasingly focus on efficient deployment of annual immunization effort with a strong focus on individuals at high risk and those who care for them.

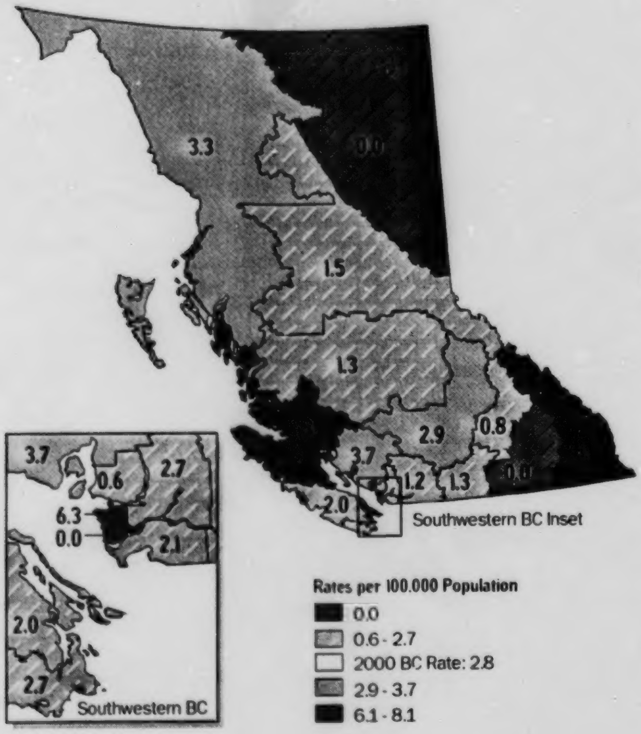
Influenza Rates by Year, 1992-2000



	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Influenza [illegible]	45	115	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Influenza [illegible]	1.3	3.2	1.4	3.6	4.1	3.9	[illegible]	12.1	[illegible]

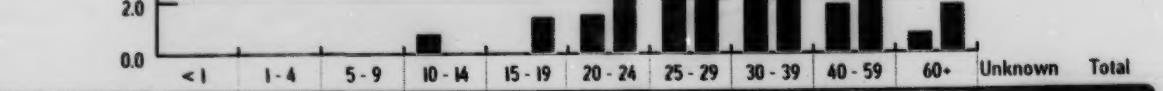
Not Nationally Notifiable

Acute Hepatitis B Rates by Health Region, 2000


3.3
0.0
1.5
1.3
2.9
0.8
3.7
1.2
1.3
0.0
2.0
Southwestern BC Inset
3.7
0.6
2.7
6.3
0.0
2.1
2.0
2.7
Southwestern BC
Rates per 100.000 Population
0.0
0.6 - 2.7
2000 BC Rate: 2.8
2.9 - 3.7
6.1 - 8.1

HR	Health Region	Cases	Rate
1	East Kootenay	5	6.1
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	3	1.3
5	Thompson	4	2.9
6	Fraser Valley	3	1.2
7	South Fraser Valley	12	2.1
8	Simon Fraser	14	2.7
9	Coast Garibaldi	3	3.7
10	Central Vancouver Island	5	2.0
11	Upper Island/Central Coast	10	8.1
12	Cariboo	1	1.3
13	North West	3	3.3
14	Peace Liard	0	0.0
15	Northern Interior	2	1.5
16	Vancouver	36	6.3
18	North Shore	1	0.6
19	Richmond	0	0.0
20	Capital	9	2.7

Acute Hepatitis B Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Acute Hepatitis B Cases - Female	0	0	0	1	0	2	3	8	11	[illegible]	[illegible]	[illegible]
Acute Hepatitis B Cases - Male	0	0	0	0	2	6	16	24	29	6	1	84
Acute Hepatitis B Rate - Female	0.0	0.0	0.0	0.8	0.0	1.5	2.2	2.4	1.9	0.8	[illegible]	[illegible]
Acute Hepatitis B Rate - Male	0.0	0.0	0.0	0.0	1.4	4.4	11.6	7.2	5.0	1.9		4.2

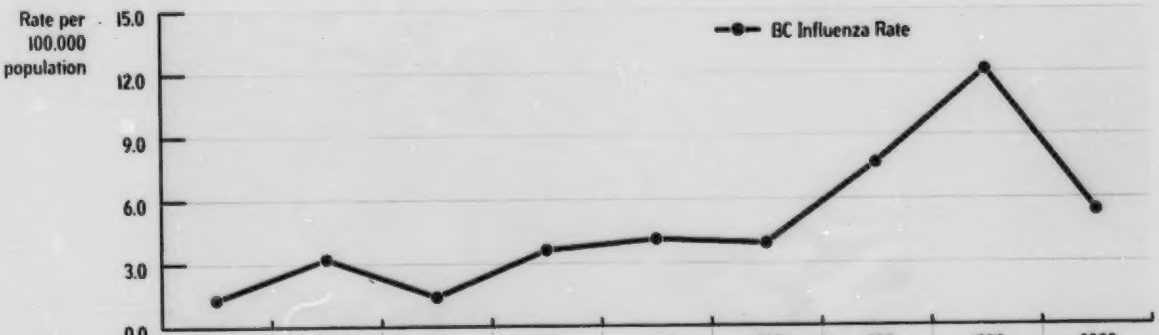
Influenza

The rate of influenza in British Columbia reached 5.4 per 100,000 population during 2000 compared with 12.1 in 1999. This decrease is explained by the relatively mild influenza season experienced in British Columbia and worldwide during the 2000-2001 winter season. The mild season is attributed to the predominance of influenza type B viruses. The highest age specific rates were experienced by infants less than 1 year of age in whom it exceeded 30.0 per 100,000 population and by those 60 years of age and above. For the latter age group, female rates were reported at over 17.6 per 100,000 population and male rates reported at 9.5 per 100,000 population. Influenza reports were received from all regions of the province. However, inter-regional comparisons may not be valid because of differences in the rate of laboratory confirmation and in the distribution of sentinel physicians from whom many of the reports were received.

Influenza like illness is tracked by a network of family physicians across British Columbia. Peak activity during December 2000 did not exceed historic numbers and reached 2.5% of all visits to sentinel physicians.

Influenza remains one of the major causes of vaccine preventable morbidity and is a major contributor to hospitalizations and premature death in British Columbia. Control efforts must increasingly focus on efficient deployment of annual immunization effort with a strong focus on individuals at high risk and those who care for them.

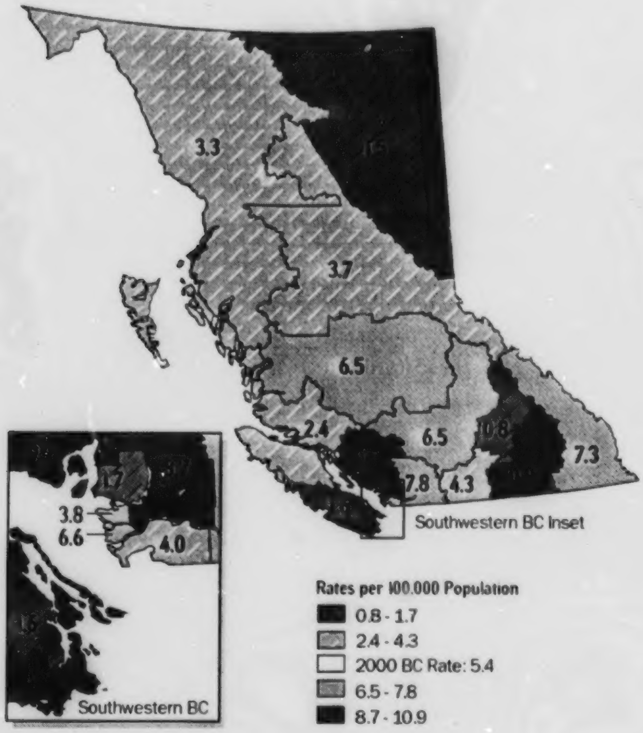
Influenza Rates by Year, 1992-2000



	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Influenza Cases	45	115	53	135	161	156	309	486	[illegible]
BC Influenza Rate	1.3	3.2	1.4	3.6	4.1	3.9	7.7	12.1	5.4

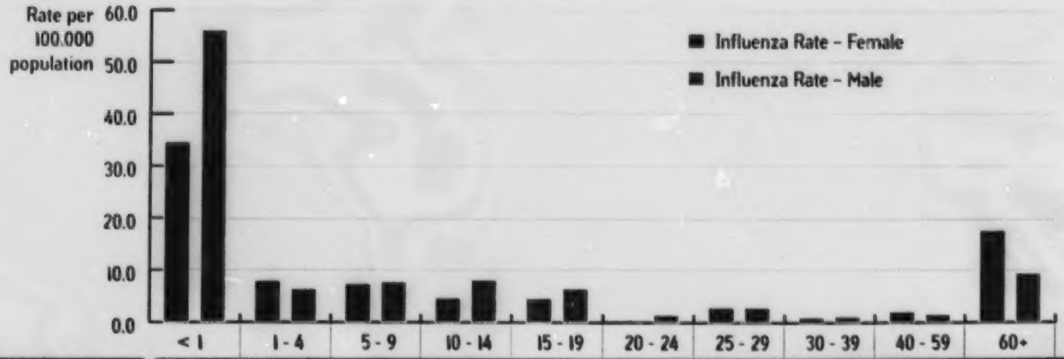
Not Nationally Notifiable

Influenza Rates by Health Region, 2000


3.3
1.5
3.7
6.5
2.4
6.5
10.9
7.3
7.8
4.3
Southwestern BC Inset
3.8
6.6
4.0
1.7
Southwestern BC
Rates per 100,000 Population
0.8 - 1.7
2.4 - 4.3
2000 BC Rate: 5.4
6.5 - 7.8
8.7 - 10.9

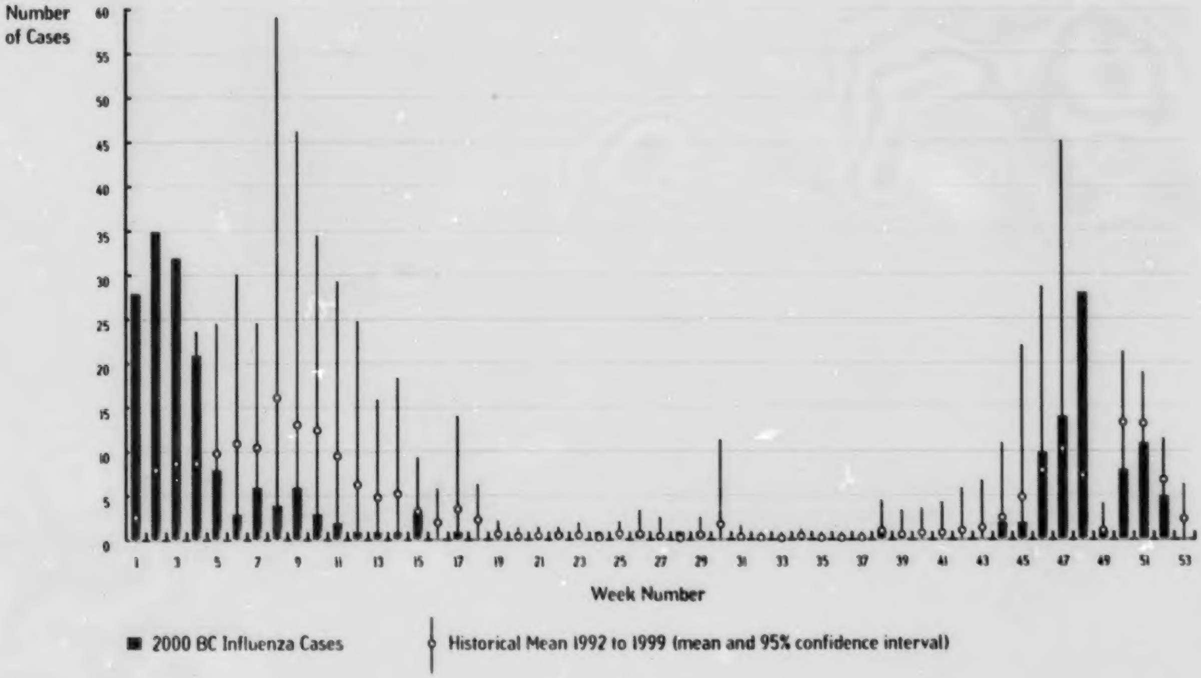
HR	Health Region	Cases	Rate
1	East Kootenay	6	7.3
2	West Kootenay - Boundary	9	10.9
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	10	4.3
5	Thompson	9	6.5
6	Fraser Valley	19	7.8
7	South Fraser Valley	23	4.0
8	Simon Fraser	45	8.7
9	Coast Garibaldi	8	9.9
10	Central Vancouver Island	4	1.6
11	Upper Island/Central Coast	3	2.4
12	Cariboo	5	6.5
13	North West	3	3.3
14	Peace Liard	1	1.5
15	Northern Interior	5	3.7
16	Vancouver	22	3.8
18	North Shore	3	1.7
19	Richmond	11	6.6
20	Capital	31	9.3

Influenza Rates by Age Group and Sex, 2000

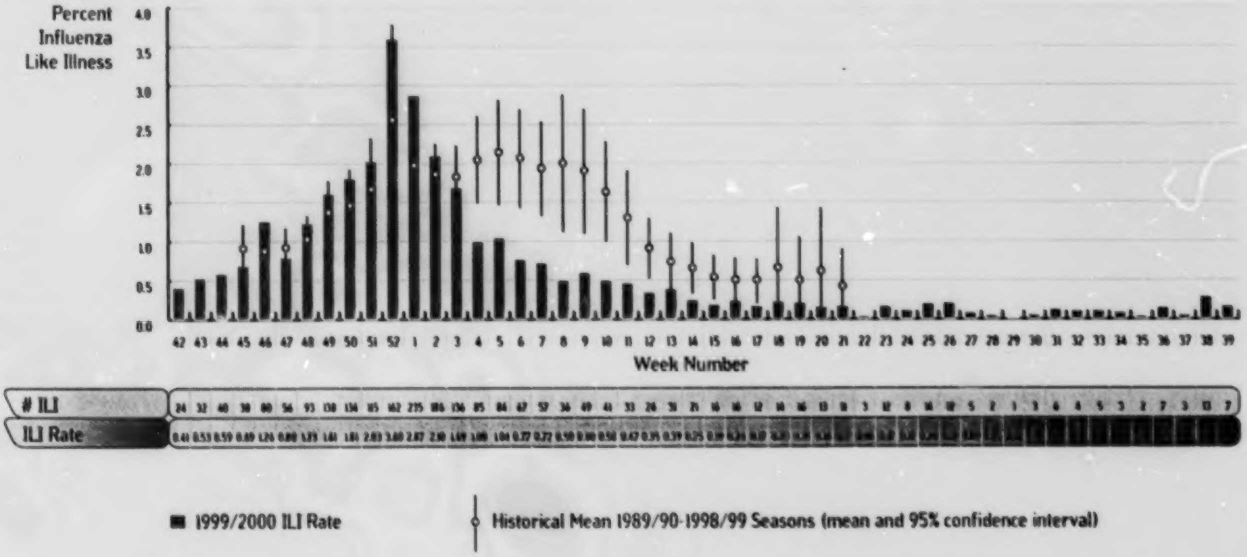


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Influenza Cases - Female	7	7	9	6	6	0	4	[illegible]	[illegible]	[illegible]	[illegible]
Influenza Cases - Male	12	6	10	11	9	2	4	4	9	30	97
Influenza Rate - Female	34.6	7.9	7.4	4.7	4.6	0.0	2.9	0.9	[illegible]	[illegible]	[illegible]
Influenza Rate - Male	56.2	6.4	7.8	8.2	6.5	1.5	2.9	1.2	1.6	9.5	4.8

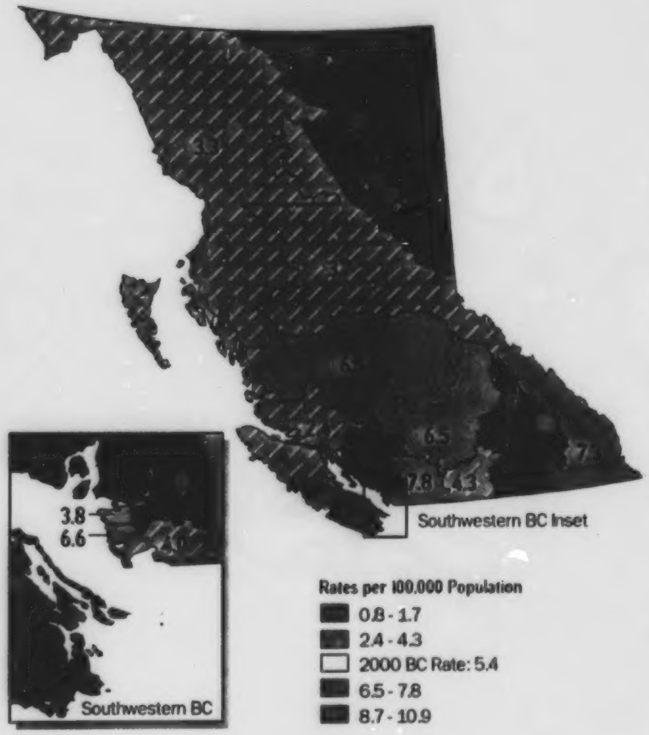
2000 BC Influenza Cases by Week Compared to Historical Numbers from 1992 to 1999



Percent of Sentinel Physician Visits due to Influenza Like Illness (ILI) in BC, 1999/2000 Season Compared to 1989/90-1998/99 Seasons

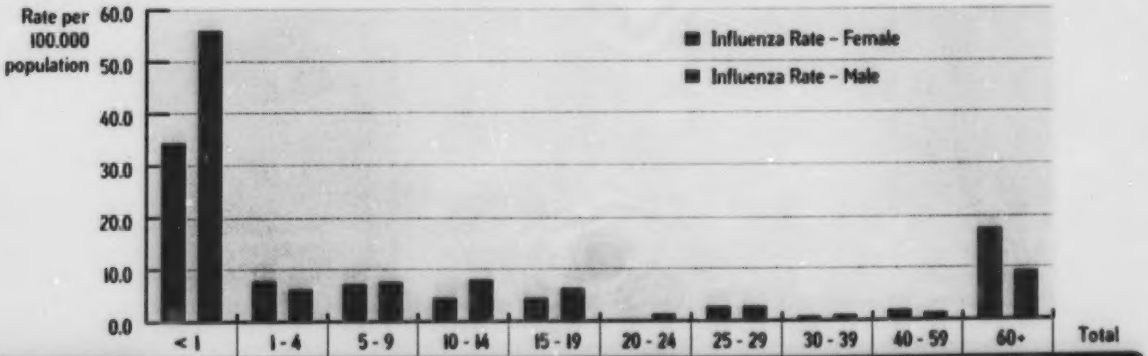


Influenza Rates by Health Region, 2000


3.3
6.5
7.8
4.3
7.3
3.8
6.6
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.8 - 1.7
2.4 - 4.3
2000 BC Rate: 5.4
6.5 - 7.8
8.7 - 10.9

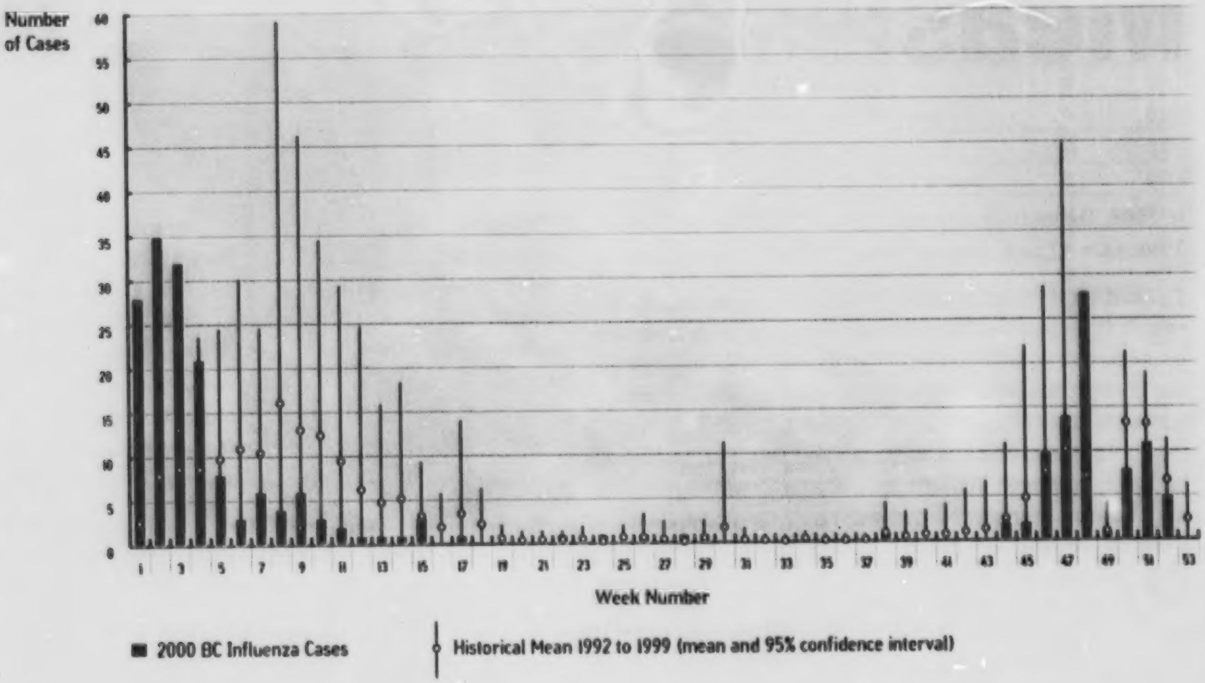
HR	Health Region	Cases	Rate
1	East Kootenay	6	7.3
2	West Kootenay - Boundary	9	10.9
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	10	4.3
5	Thompson	9	6.5
6	Fraser Valley	19	7.8
7	South Fraser Valley	23	4.0
8	Simon Fraser	45	8.7
9	Coast Garibaldi	8	9.9
10	Central Vancouver Island	4	1.6
11	Upper Island/Central Coast	3	2.4
12	Cariboo	5	6.5
13	North West	3	3.3
14	Peace Liard	1	1.5
15	Northern Interior	5	3.7
16	Vancouver	22	3.8
18	North Shore	3	1.7
19	Richmond	11	6.6
20	Capital	31	9.3

Influenza Rates by Age Group and Sex, 2000

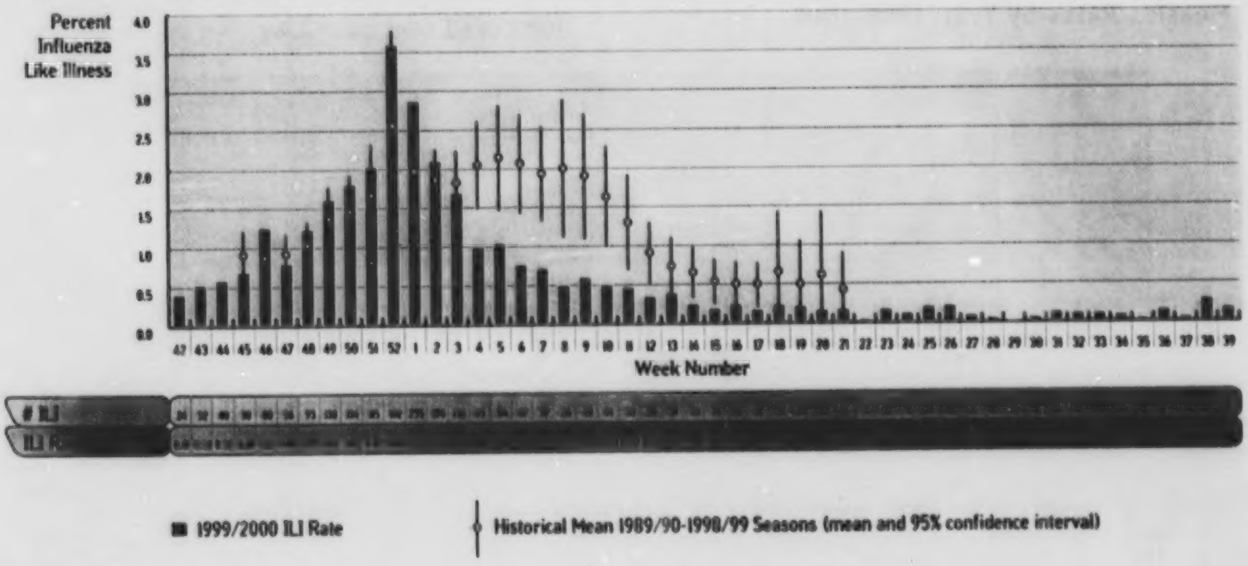


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Influenza [illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Influenza Cases - Male	12	6	10	11	9	2	4	4	[illegible]	[illegible]	[illegible]
Influenza R[illegible]	34.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Influenza Rate - Male	56.2	6.4	7.8	8.2	6.5	1.5	2.9	[illegible]	[illegible]	[illegible]	[illegible]

2000 BC Influenza Cases by Week Compared to Historical Numbers from 1992 to 1999



Percent of Sentinel Physician Visits due to Influenza Like Illness (ILI) in BC. 1999/2000 Season Compared to 1989/90-1998/99 Seasons



Measles

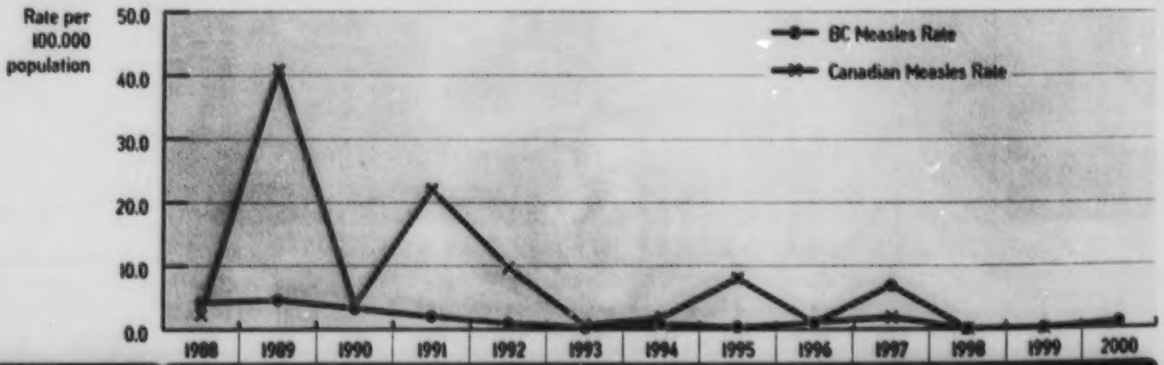
In 2000, the measles rate was 1.0 per 100,000 population. There were 42 cases reported during the year.

Elevated activity is attributed to an outbreak in a community of unimmunized persons. This outbreak started following extensive social contact between unimmunized families. Voluntary quarantine of infectious cases and exclusion of susceptible contacts was advised but efficient spread was still demonstrated. In total, 33 cases of measles were identified. Of these, 11 were laboratory confirmed. The difference in attack rate between the immunized and unimmunized was highly significant. Even a single dose of measles vaccine offered significant protection to those exposed.

This outbreak demonstrates the exquisite ease of spread of measles and the importance of maintaining high coverage rates with 2 doses of measles containing vaccine. Despite extensive contact follow-up, vaccination recommendations and exclusion policies, this outbreak spread quickly through large and frequent social interaction between communities. Public health experts must react quickly and liaise effectively with communities of conscientious objectors if the impact of measles within these communities, and its further spread, is to be reduced.

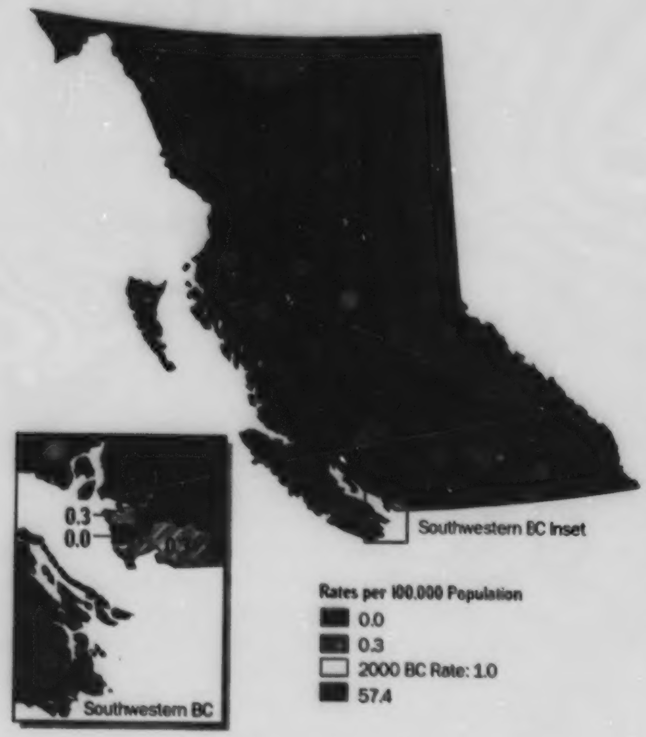
The other 4 measles cases in British Columbia were laboratory confirmed. Three out of four cases were exposed to known measles cases while outside of Canada and were also known to be unimmunized.

Measles Rates by Year, 1988-2000



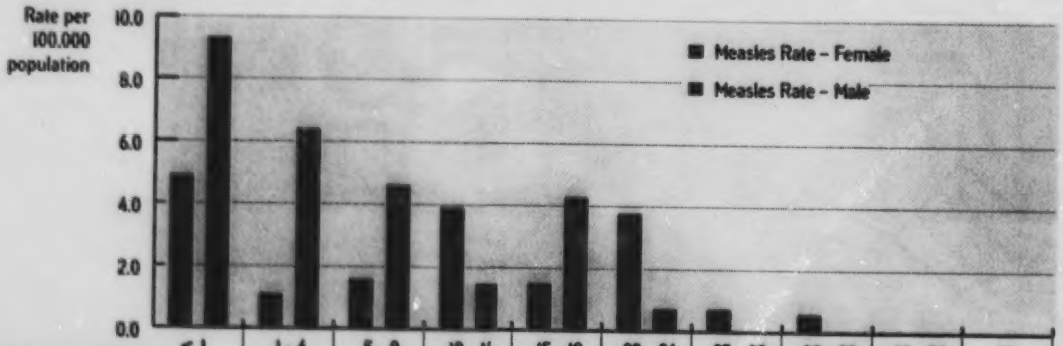
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Measles Rate	4.2	4.6	3.3	2.0	1.0	[illegible]	0.8	0.4	1.0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2.3	40.3	[illegible]	22.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Measles Rates by Health Region, 2000


0.3
0.0
0.3
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
0.3
2000 BC Rate: 1.0
57.4

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	2	0.3
8	Simon Fraser	0	0.0
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	38	57.4
15	Northern Interior	0	0.0
16	Vancouver	2	0.3
18	North Shore	0	0.0
19	Richmond	0	0.0
20	Capital	0	0.0

Measles Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Measles Cases – Male	2	6	6	2	6	1	0	0	0	0	23
[illegible]	4.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Measles Rate – Male	9.4	6.4	4.7	1.5	4.3	0.7	0.0	0.0	0.0	0.0	1.1

Measles

In 2000, the measles rate was 1.0 per 100,000 population. There were 42 cases reported during the year.

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This outbreak demonstrates the exquisite ease of spread of measles and the importance of maintaining high coverage rates with 2 doses of measles containing vaccine. Despite extensive contact follow-up, vaccination recommendations and exclusion policies, this outbreak spread quickly through large and frequent social interaction between communities. Public health experts must react quickly and liaise effectively with communities of conscientious objectors if the impact of measles within these communities, and its further spread, is to be reduced.

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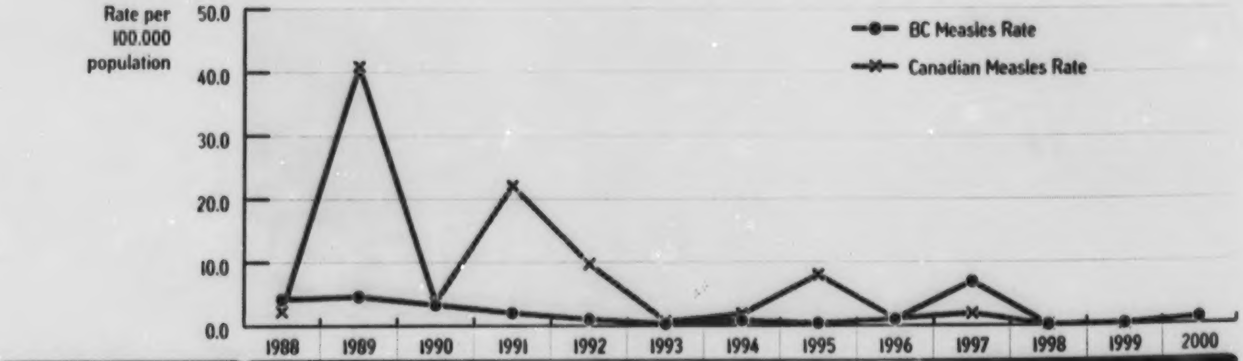
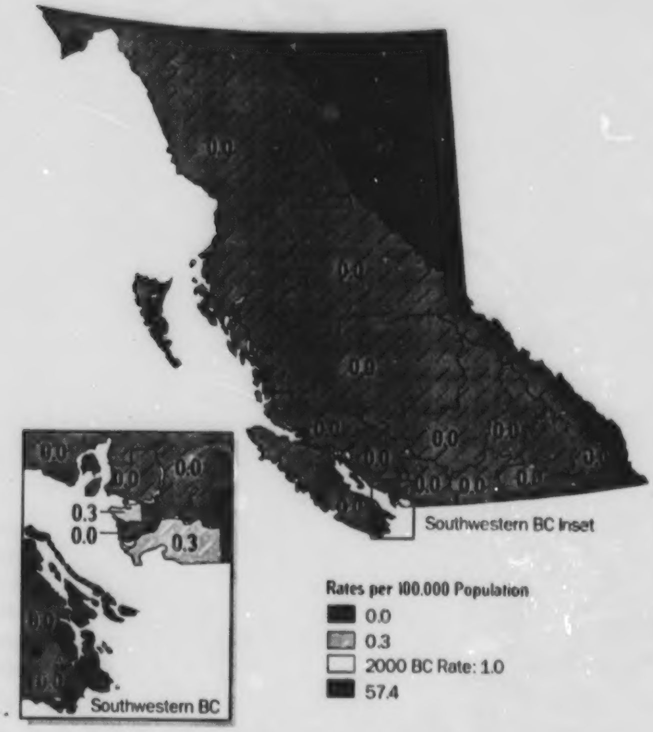
Measles Rates by Year, 1988-2000



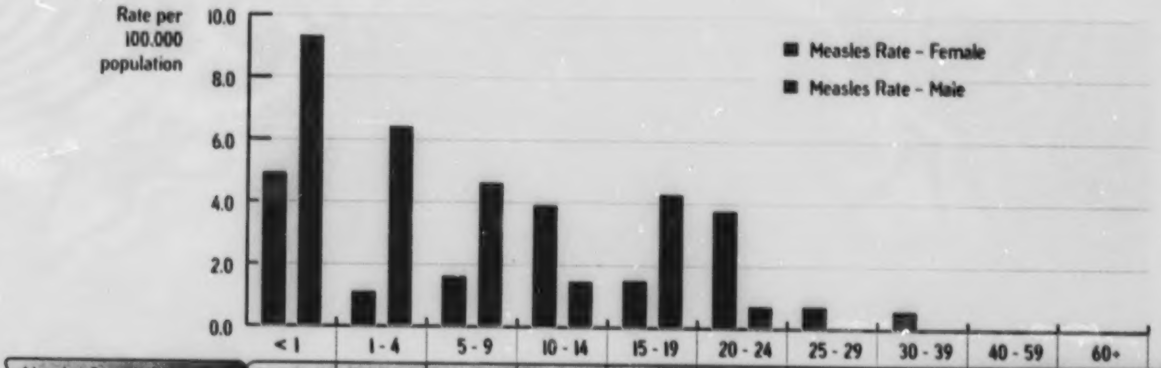
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Measles Cases	131	146	107	68	34	12	30	15	39	[illegible]	[illegible]	[illegible]	[illegible]
BC Measles Rate	4.2	4.6	3.3	2.0	1.0	0.3	0.8	0.4	1.0	6.9	0.1	0.2	1.0
Canadian Measles Rate	2.3	40.8	3.7	22.0	9.7	0.7	1.8	8.0	1.1	[illegible]	[illegible]	[illegible]	[illegible]

Measles Rates by Health Region, 2000


0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.3
0.0
0.3
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0
0.3
2000 BC Rate: 1.0
57.4

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	2	0.3
8	Simon Fraser	0	0.0
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	38	57.4
15	Northern Interior	0	0.0
16	Vancouver	2	0.3
18	North Shore	0	0.0
19	Richmond	0	0.0
20	Capital	0	0.0

Measles Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Measles Cases - Female	1	1	2	5	2	5	1	2	[illegible]	[illegible]	[illegible]
Measles Cases - Male	2	6	6	2	6	1	0	0	0	0	23
Measles Rate - Female	4.9	1.1	1.6	3.9	1.5	3.5	0.7	[illegible]	[illegible]	[illegible]	[illegible]
Measles Rate - Male	9.4	6.4	4.7	1.5	4.3	0.7	0.0	0.0	0.0	0.0	1.1

Mumps

The rate of mumps in British Columbia during 2000 was 0.4 per 100,000 population representing only 17 cases. This relatively low rate has remained constant since 1998. Cases are distributed between the ages of 5 and 29 predominately and are usually linked to imported disease affecting small unimmunized groups.

Pertussis

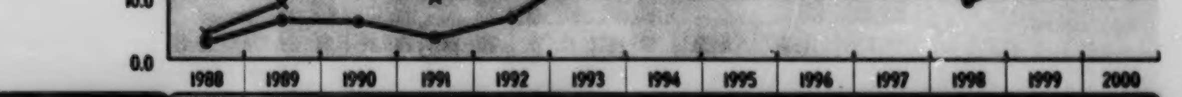
Outbreaks on a cycle of 4-6 years are expected for pertussis and during 2000 an outbreak occurred. The rate of pertussis in British Columbia reached 44.4 per 100,000 population during 2000 compared to 13.5 per 100,000 population in 1999. The increase is reflective of the province wide outbreak with isolated pockets of particularly intense activity. Activity in most of the regions increased sharply during the month of April. This represented unusual seasonal activity – typically pertussis rates begin to climb in BC during July and August.

The age distribution of the outbreak differs from previous outbreaks. For example, during the outbreak of 1996/97, rates were highest among infants followed by school-aged and pre-school children. During the 2000 outbreak, rates were highest amongst adolescents 10-14 followed by older school children (7-9 years) although infants are also experiencing high rates. For the first time, the rate amongst 15-19 year olds exceeded that of pre-school children.

Infants, preschool and young school-aged children comprise a diminishing proportion of the cases identified during the sequential outbreaks, 1993, 1996 and 2000. The proportion of cases amongst school aged children (7-9 years) has remained steady. Adolescents comprise an increasing proportion of pertussis cases – while children less than 6 years of age comprised more than 60% of cases during the 1993 outbreak, in 2000, more than 60% of cases were 10 years of age or older.

Acellular pertussis vaccines have been used in BC as part of the routine childhood program at 2, 4, 6 and 18 months with additional booster at 4-6 years since June 1997. An adult formulation acellular pertussis vaccine has been licensed. Although this vaccine is safe and immunogenic, more direct evidence of its effectiveness is needed before broad recommendations can be made for its preferred use.

Pertussis Rates by Year, 1988-2000



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Pertussis [illegible]	2.6	6.1	5.9	3.4	6.5	14.1	10.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	4.1	8.9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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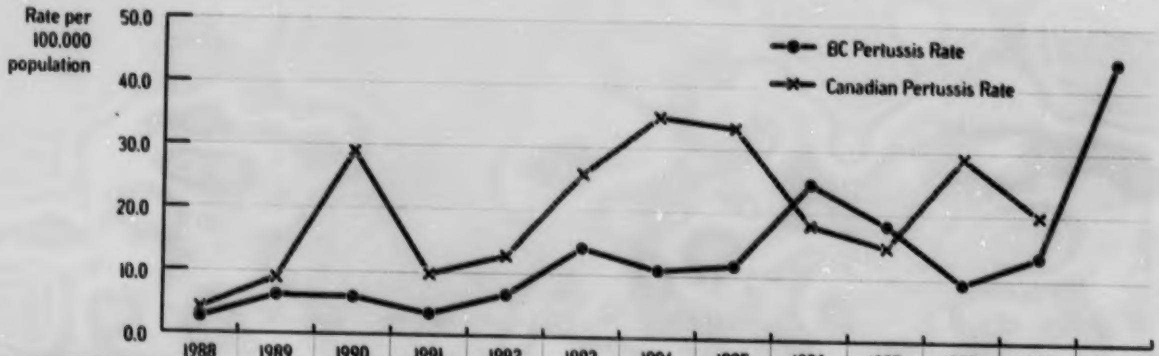
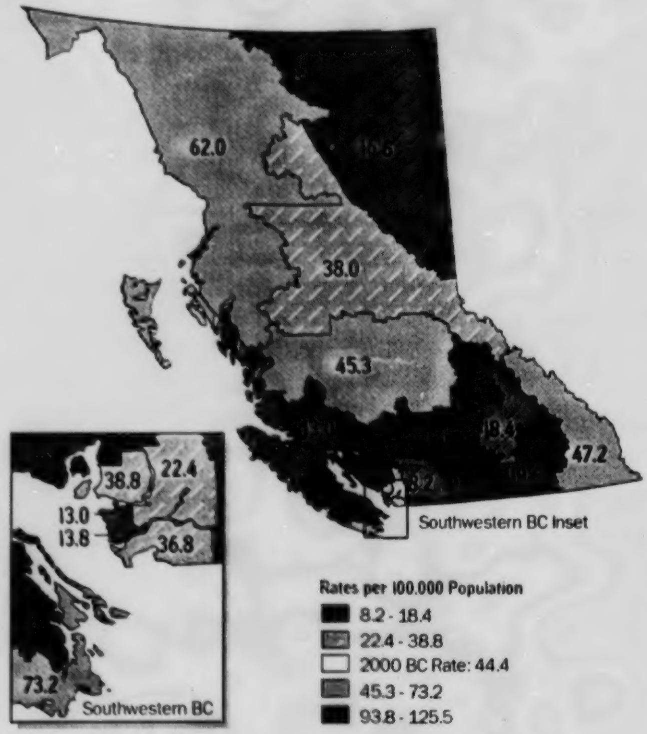
Pertussis Rates by Year, 1988-2000



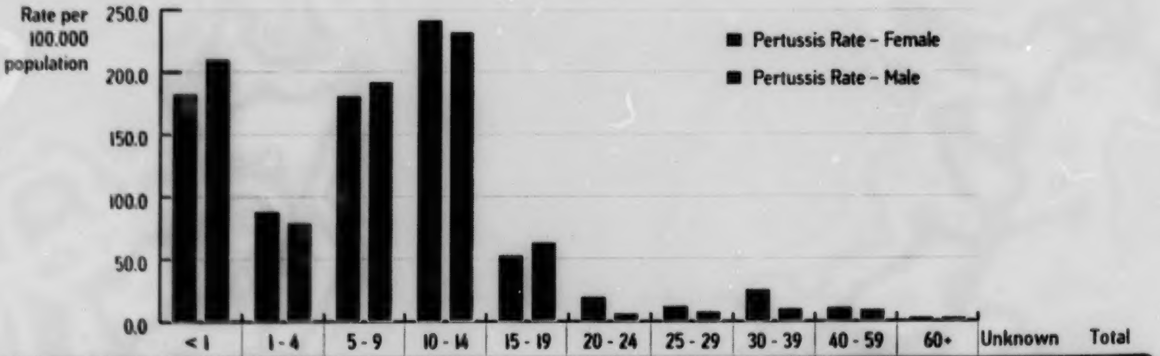
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Pertussis Cases	81	195	194	115	227	503	395	430	96[illegible]	72[illegible]	36[illegible]	[illegible]	[illegible]
BC Pertussis Rate	2.6	6.1	5.9	3.4	6.5	14.1	10.7	11.6	24.7	18.3	9.2	13.5	44.4
Canadian Pertussis Ra	4.1	8.9	29.0	9.7	12.7	25.0	35.0	33.4	10.[illegible]	11.[illegible]	2[illegible]	[illegible]	[illegible]

Pertussis Rates by Health Region, 2000


62.0
16.6
38.0
45.3
18.4
47.2
8.2
Southwestern BC Inset
38.8
22.4
13.0
13.8
36.8
73.2
Southwestern BC
Rates per 100,000 Population
8.2 - 18.4
22.4 - 38.8
2000 BC Rate: 44.4
45.3 - 73.2
93.8 - 125.5

HR	Health Region	Cases	Rate
1	East Kootenay	39	47.2
2	West Kootenay - Boundary	99	119.6
3	North Okanagan	22	18.4
4	South Okanagan - Similkameen	227	97.4
5	Thompson	157	114.1
6	Fraser Valley	20	8.2
7	South Fraser Valley	212	36.8
8	Simon Fraser	116	22.4
9	Coast Garibaldi	101	125.5
10	Central Vancouver Island	230	93.8
11	Upper Island/Central Coast	16	13.0
12	Cariboo	35	45.3
13	North West	57	62.0
14	Peace Liard	11	16.6
15	Northern Interior	51	38.0
16	Vancouver	75	13.0
18	North Shore	70	38.8
19	Richmond	23	13.8
20	Capital	245	73.2

Pertussis Rates by Age Group and Sex, 2000

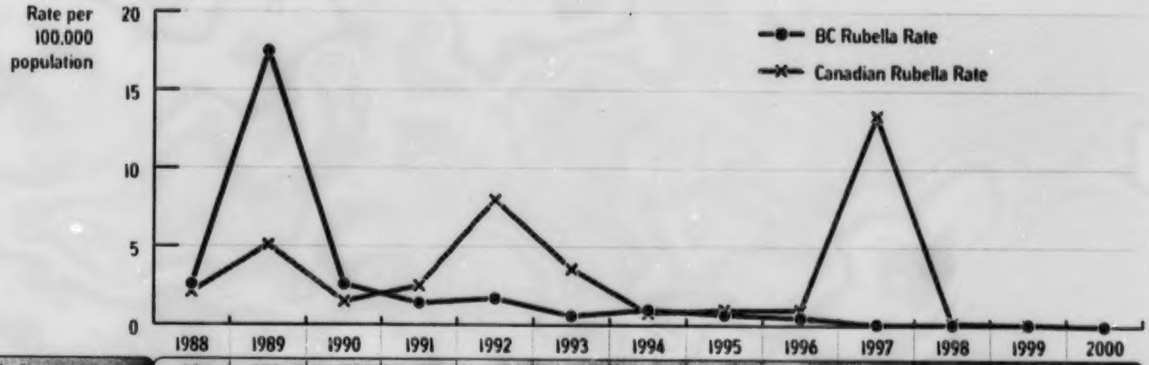


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Pertussis Cases - Female	37	78	221	307	70	26	17	84	[illegible]	[illegible]	[illegible]	[illegible]
Pertussis Cases - Male	45	74	248	312	88	9	11	35	55	10	1	888
Pertussis Cases - Unknown	0	0	0	1	0	0	0	0	0	0	[illegible]	[illegible]
Pertussis Rate - Female	182.8	88.2	180.9	241.6	53.2	19.7	12.4	25.6	[illegible]	[illegible]	[illegible]	[illegible]
Pertussis Rate - Male	210.6	79.3	192.3	232.2	63.3	6.6	8.0	10.5	9.5	3.2		44.0

Rubella

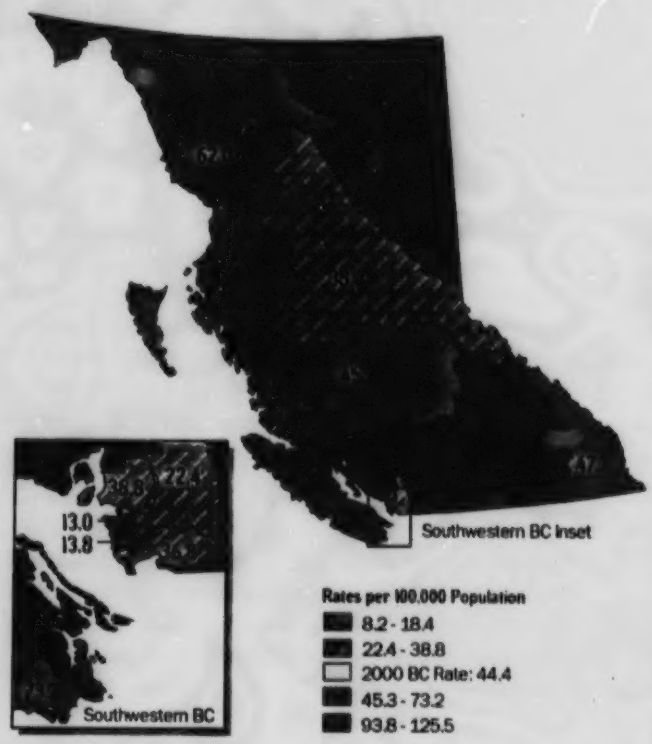
There were only 2 confirmed cases of rubella diagnosed in British Columbia during the year 2000. New cases were confined to the 1-9 year age group. Near elimination of rubella from British Columbia is rewarded by the absence of congenital rubella syndrome an important and tragic contributor to neonatal morbidity.

Rubella Rates by Year, 1988-2000



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Rubella Cases	82	559	85	47	58	22	36	26	19	5	1	[illegible]	2
BC Rubella Rate	2.6	17.5	2.6	1.4	1.7	0.6	1.0	0.7	0.5	0.1	0.1	0.1	0.0
Canadian Rubella Rate	2.1	5.1	1.5	2.5	8.0	3.6	0.8	1.0	1.0	13.4	0.2	0.1	

Pertussis Rates by Health Region, 2000


62.0
22.4
38.8
13.0
13.8
47.2
73.2
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
▨ 8.2 - 18.4
▨ 22.4 - 38.8
☐ 2000 BC Rate: 44.4
■ 45.3 - 73.2
■ 93.8 - 125.5

HR	Health Region	Cases	Rate
1	East Kootenay	39	47.2
2	West Kootenay - Boundary	99	119.6
3	North Okanagan	22	18.4
4	South Okanagan - Similkameen	227	97.4
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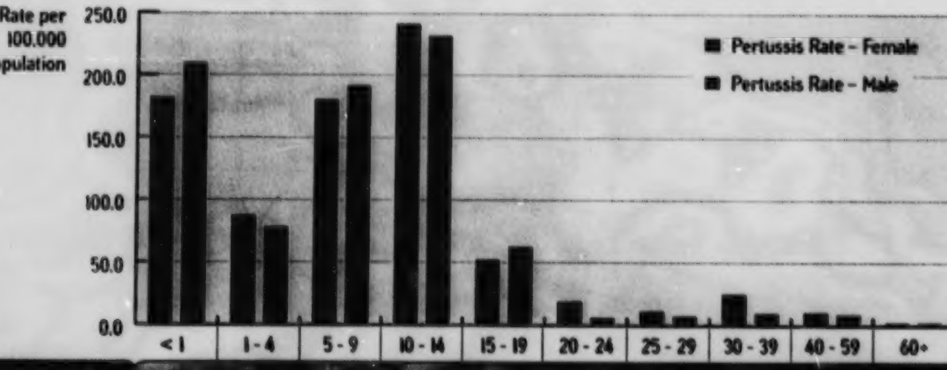
6	Fraser Valley	20	8.2
7	South Fraser Valley	212	36.8
8	Simon Fraser	116	22.4
9	Coast Garibaldi	101	125.5
10	Central Vancouver Island	230	93.8
11	Upper Island/Central Coast	16	13.0
12	Cariboo	35	45.3
13	North West	57	62.0
14	Peace Liard	11	16.6
15	Northern Interior	51	38.0
16	Vancouver	75	13.0
18	North Shore	70	38.8
19	Richmond	23	13.8
20	Capital	245	73.2

Pertussis Rates by Age Group and Sex, 2000

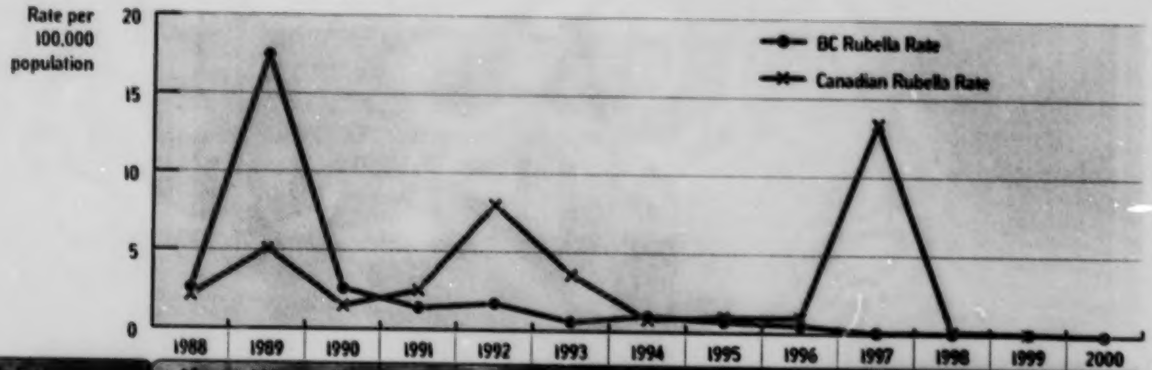


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pertussis Cases - Male	45	74	248	312	88	9	11	35	[illegible]	[illegible]	[illegible]	[illegible]
Pertussis Cases - Unknown	0	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pertussis Rate - Male	218.6	[illegible]	192.3	232.2	[illegible]	[illegible]	[illegible]	10.5	[illegible]	[illegible]	[illegible]	[illegible]

Rubella

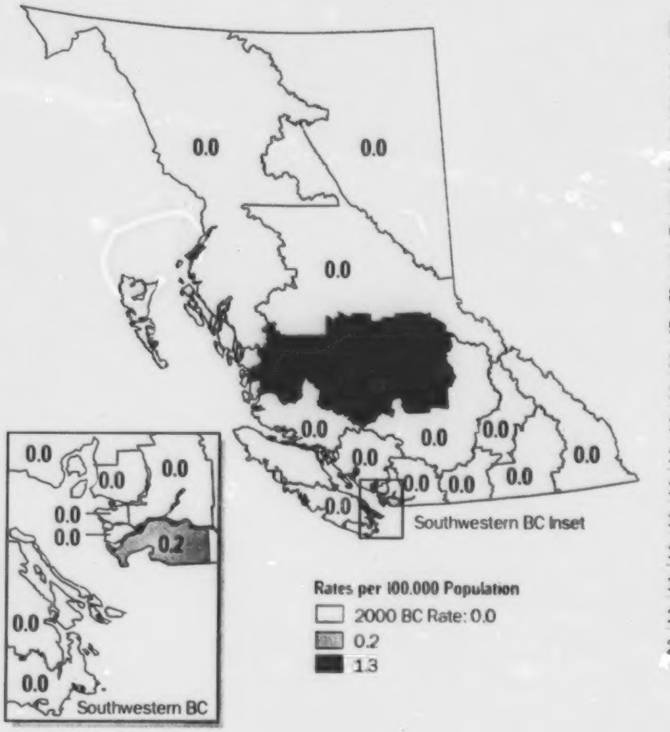
There were only 2 confirmed cases of rubella diagnosed in British Columbia during the year 2000. New cases were confined to the 1-9 year age group. Near elimination of rubella from British Columbia is rewarded by the absence of congenital rubella syndrome an important and tragic contributor to neonatal morbidity.

Rubella Rates by Year, 1988-2000



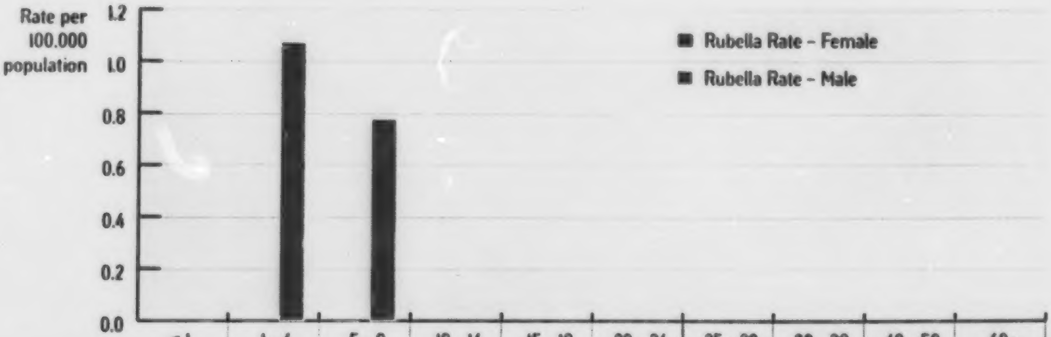
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Rubella Cases	82	559	85	47	58	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Rubella Rate	2.6	17.5	2.6	1.4	1.7	0.6	1.0	0.7	0.5	[illegible]	[illegible]	[illegible]	[illegible]
Canadian Rubella Rate	2.1	5.3	1.5	2.5	8.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Rubella Rates by Health Region, 2000


0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
Southwestern BC Inset
0.0
0.0
0.0
0.0
0.0
0.2
0.0
0.0
Southwestern BC
Rates per 100.000 Population
☐ 2000 BC Rate: 0.0
▨ 0.2
■ 1.3

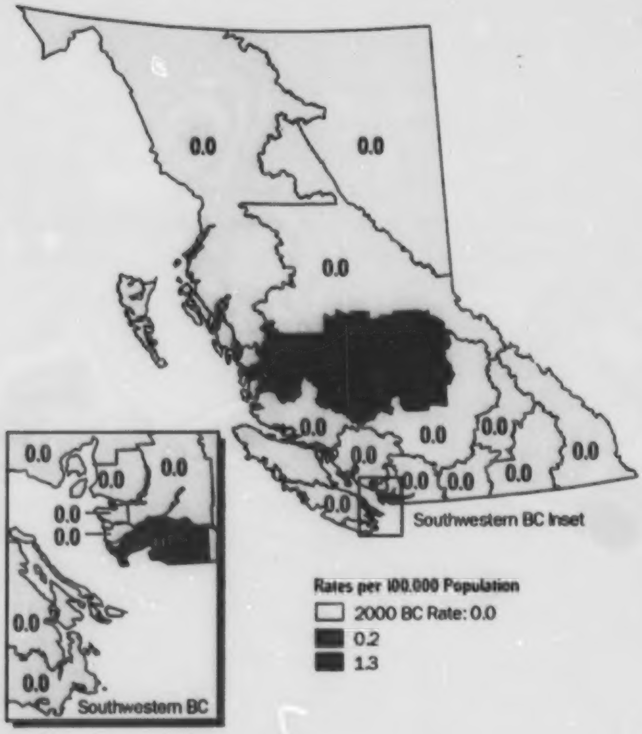
HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	1	0.2
8	Simon Fraser	0	0.0
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	1	1.3
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	0	0.0
18	North Shore	0	0.0
19	Richmond	0	0.0
20	Capital	0	0.0

Rubella Rates by Age Group and Sex, 2000



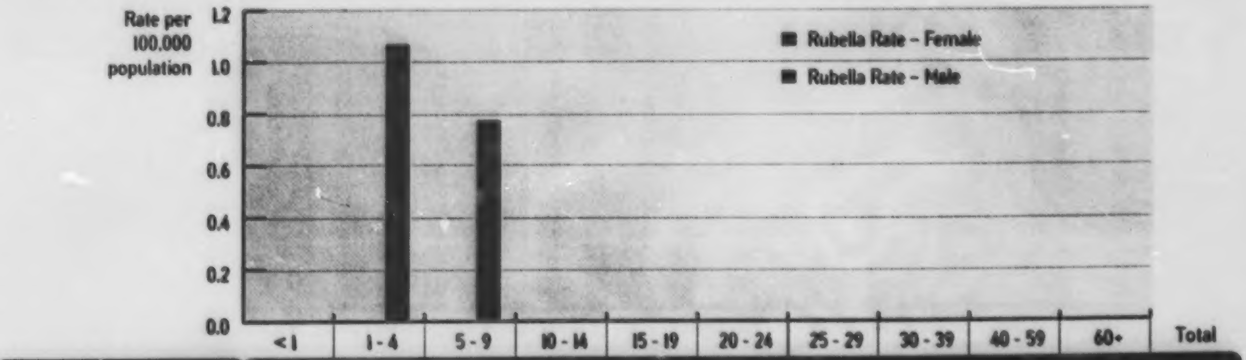
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Rubella Cases - Female	0	0	0	0	0	0	0	0	0	0	[illegible]
Rubella Cases - Male	0	1	1	0	0	0	0	0	0	0	2
Rubella Rate - Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]
Rubella Rate - Male	0.0	1.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Rubella Rates by Health Region, 2000


0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
Southwestern BC Inset
0.0
0.0
0.0
0.0
0.0
0.0
0.0
Southwestern BC
Rates per 100,000 Population
2000 BC Rate: 0.0
0.2
1.3

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	1	0.2
8	Simon Fraser	0	0.0
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	1	1.3
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	0	0.0
18	North Shore	0	0.0
19	Richmond	0	0.0
20	Capital	0	0.0

Rubella Rates by Age Group and Sex, 2000



	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+	Total
Rubella C[illegible]	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rubella Cases – M[illegible]	0	1	1	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]
Rubella Ra[illegible]	0.0	0.0	0.0	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Rubella Ra[illegible]	0.0	1.1	0.8	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]

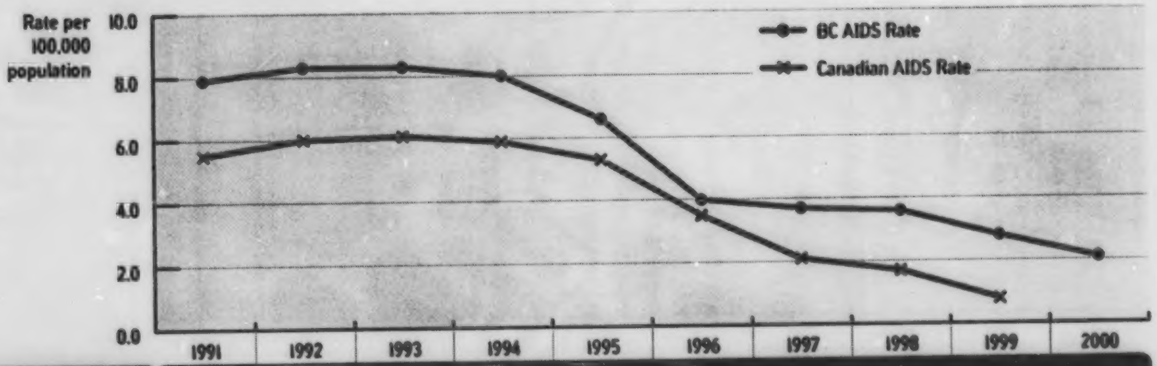
Sexually Transmitted and Bloodborne Pathogens

AIDS

The BC rate of 2.1 per 100,000 population of newly reported AIDS cases continued the decline from previous years. The Vancouver/Richmond and Coast Garibaldi Health Regions had rates above the provincial average.

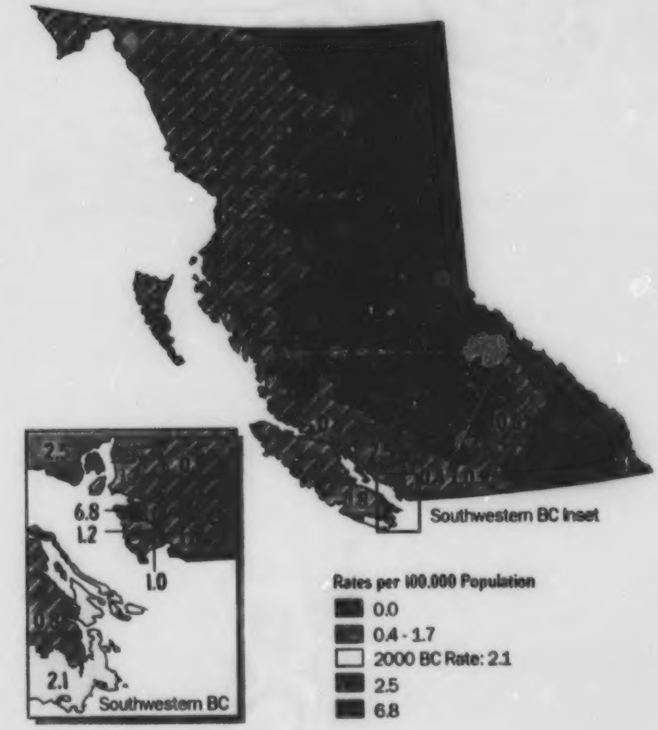
The age group 30-39 years had the highest rate for males. For females, the highest rate was for ages 25-29.

AIDS Rates by Year, 1991-2000



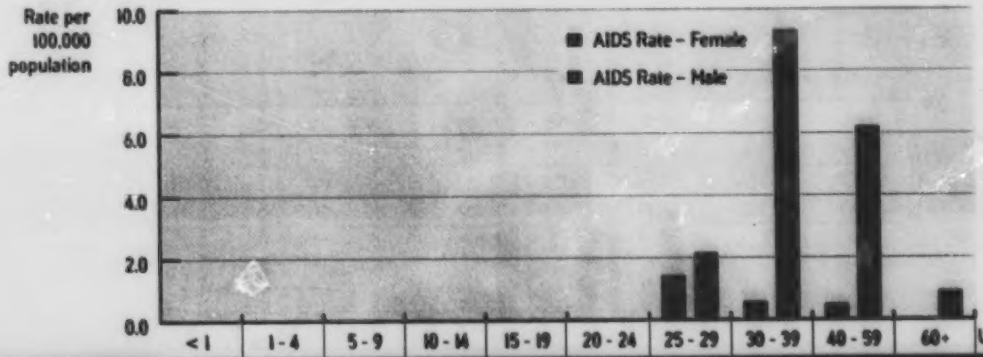
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC AIDS [illegible]	265	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC AIDS Rate	7.9	8.3	8.3	8.0	6.6	4.0	3.7	3.8	[illegible]	[illegible]
Canadian [illegible]	5.5	6.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

AIDS Rates by Health Region, 2000


2.5
6.8
1.2
1.0
0.8
2.1
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
0.4 - 1.7
2000 BC Rate: 2.1
2.5
6.8

HR	Health Region	Reports	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	2	0.9
5	Thompson	0	0.0
6	Fraser Valley	1	0.4
7	South Fraser Valley	6	1.0
8	Simon Fraser	3	0.9
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	2	0.8
11	Upper Island/Central Coast	1	0.8
12	Cariboo	0	0.0
13	North West	1	1.1
14	Peace Liard	1	0.0
15	Northern Interior	0	0.0
16	Vancouver	39	6.8
17	Burnaby	2	1.0
18	North Shore	3	1.7
19	Richmond	2	1.2
20	Capital	7	2.1

AIDS Rates by Age Group and Sex, 2000



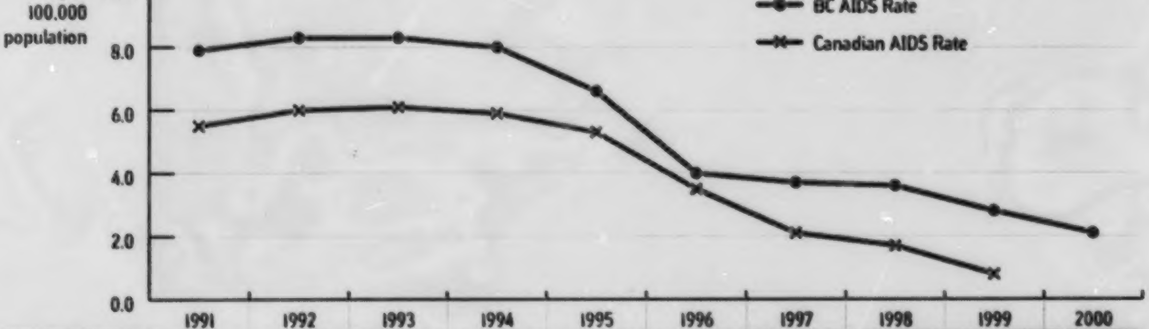
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
AIDS Cas[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AIDS Cases - [illegible]	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AIDS Case[illegible]	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AIDS Ra[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AIDS Ra[illegible]	0.0	0.0	0.0	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

AIDS

The BC rate of 2.1 per 100,000 population of newly reported AIDS cases continued the decline from previous years. The Vancouver/Richmond and Coast Garibaldi Health Regions had rates above the provincial average.

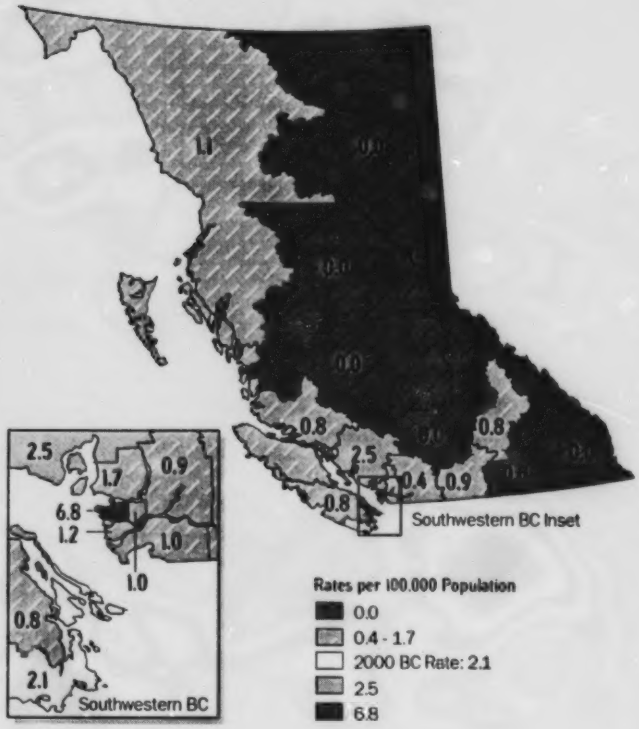
The age group 30-39 years had the highest rate for males. For females, the highest rate was for ages 25-29.

AIDS Rates by Year, 1991-2000



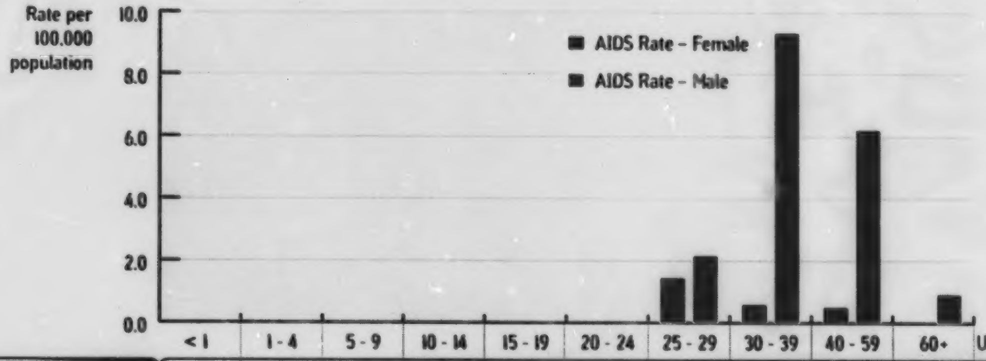
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC AIDS Cases	265	287	296	294	251	156	148	141	11	
BC AIDS Rate	7.9	8.3	8.3	8.0	6.6	4.0	3.7	3.6	2.8	2.1
Canadian AIDS Rate	5.5	6.0	6.1	5.9	5.3	3.5	2.1	1.7	0.8	

AIDS Rates by Health Region, 2000


1.1
0.0
0.0
0.0
0.8
0.0
0.8
2.5
0.4
0.9
0.8
0.0
0.0
Southwestern BC Inset
2.5
1.7
0.9
6.8
1.2
1.0
1.0
0.8
2.1
Southwestern BC
Rates per 100,000 Population
0.0
0.4 - 1.7
2000 BC Rate: 2.1
2.5
6.8

HR	Health Region	Reports	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	2	0.9
5	Thompson	0	0.0
6	Fraser Valley	1	0.4
7	South Fraser Valley	6	1.0
8	Simon Fraser	3	0.9
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	2	0.8
11	Upper Island/Central Coast	1	0.8
12	Cariboo	0	0.0
13	North West	1	1.1
14	Peace Liard	1	0.0
15	Northern Interior	0	0.0
16	Vancouver	39	6.8
17	Burnaby	2	1.0
18	North Shore	3	1.7
19	Richmond	2	1.2
20	Capital	7	2.1

AIDS Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
AIDS Cases – Female	0	0	0	0	0	0	2	2	[illegible]	[illegible]	[illegible]	[illegible]
AIDS Cases – Male	0	0	0	0	0	0	3	31	36	3	3	76
AIDS Cases – Unknown	0	0	0	0	0	0	0	2	[illegible]	[illegible]	[illegible]	[illegible]
AIDS Rate – Female	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AIDS Rate – Male	0.0	0.0	0.0	0.0	0.0	0.0	2.2	9.3	6.2	0.9		3.8

Genital Chlamydia

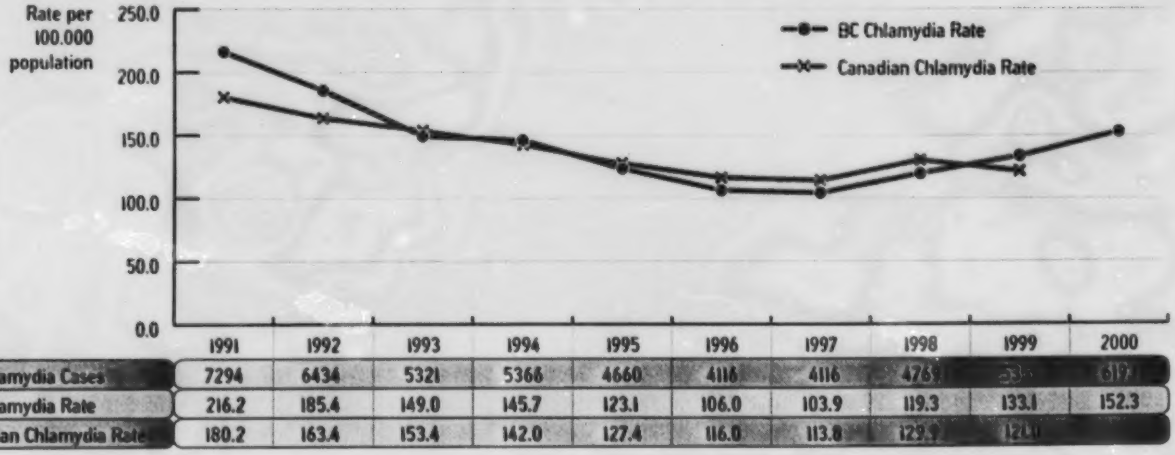
The rate of reported genital chlamydia infection increased 14.4% in 2000 to 152.3 per 100,000 population from 133.1 in 1999. This increase is slightly more than the 11.8% increase in the previous year.

The most significant geographical increase was a 107% rise in the Northern Interior Health Region. This dramatic increase was at least partially a result of a chlamydia public education program. Coast Garibaldi, East Kootenay, North Okanagan and South Okanagan Health Regions saw increases of over 50% as well.

Over half of all reported cases of chlamydia genital infection occurred in 15-24 year old females. Males 20-29 years old accounted for over 50% of male cases.

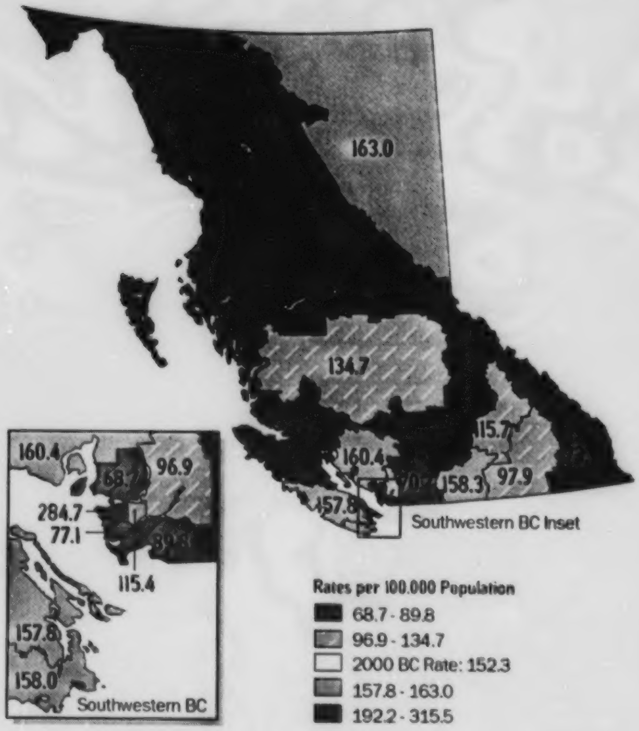
From 1993 through 2000 the BC chlamydia rates paralleled Canadian rates.

Genital Chlamydia Rates by Year, 1991-2000



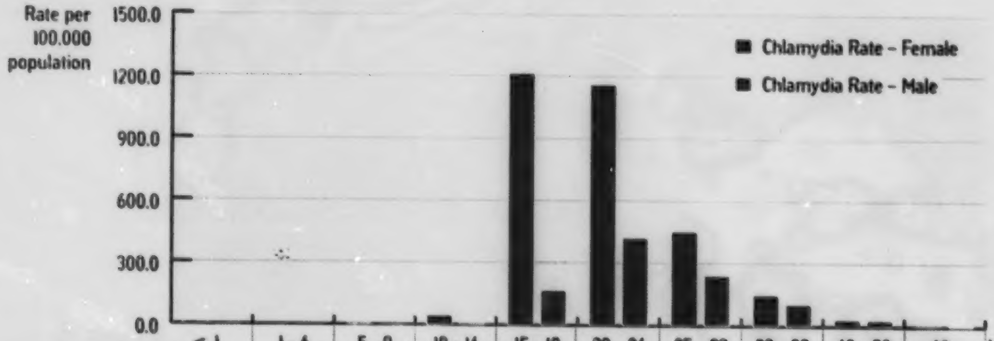
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Chlamydia Cases	7294	6434	5321	5366	4660	4116	4116	4769	[illegible]	6197
BC Chlamydia Rate	216.2	185.4	149.0	145.7	123.1	106.0	103.9	119.3	133.1	152.3
Canadian Chlamydia Rate	180.2	163.4	153.4	142.0	127.4	116.0	113.8	129.9	121.0	

Genital Chlamydia Rates by Health Region, 2000


163.0
134.7
115.7
160.4
70
158.3
97.9
157.8
Southwestern BC Inset
160.4
96.9
68.7
284.7
77.1
89.9
115.4
157.8
158.0
Southwestern BC
Rates per 100,000 Population
68.7 - 89.8
96.9 - 134.7
2000 BC Rate: 152.3
157.8 - 163.0
192.2 - 315.5

HR	Health Region	Reports	Rate
1	East Kootenay	61	73.9
2	West Kootenay - Boundary	81	97.9
3	North Okanagan	138	115.7
4	South Okanagan - Similkameen	369	158.3
5	Thompson	293	212.9
6	Fraser Valley	172	70.7
7	South Fraser Valley	517	89.9
8	Simon Fraser	315	96.9
9	Coast Garibaldi	129	160.4
10	Central Vancouver Island	387	157.8
11	Upper Island/Central Coast	236	192.2
12	Cariboo	104	134.7
13	North West	197	214.2
14	Peace Liard	108	163.0
15	Northern Interior	423	315.5
16	Vancouver	1639	284.7
17	Burnaby	222	115.4
18	North Shore	124	68.7
19	Richmond	128	77.1
20	Capital	529	158.0

Genital Chlamydia Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Chlamydia Cases – Female	2	0	1	55	1594	1529	620	486	[illegible]	[illegible]	[illegible]	[illegible]
Chlamydia Cases – Male	0	0	0	1	231	575	334	349	167	9	24	1690
Chlamydia Cases – Unknown	0	0	0	0	0	1	0	0	[illegible]	[illegible]	[illegible]	[illegible]
Chlamydia Rate – Female	9.9	0.0	0.8	43.3	1210.9	1157.5	451.2	148.0	[illegible]	[illegible]	[illegible]	[illegible]
Chlamydia Rate – Male	0.0	0.0	0.0	0.7	166.2	422.9	242.2	105.1	28.8	2.8		83.7

Genital Chlamydia

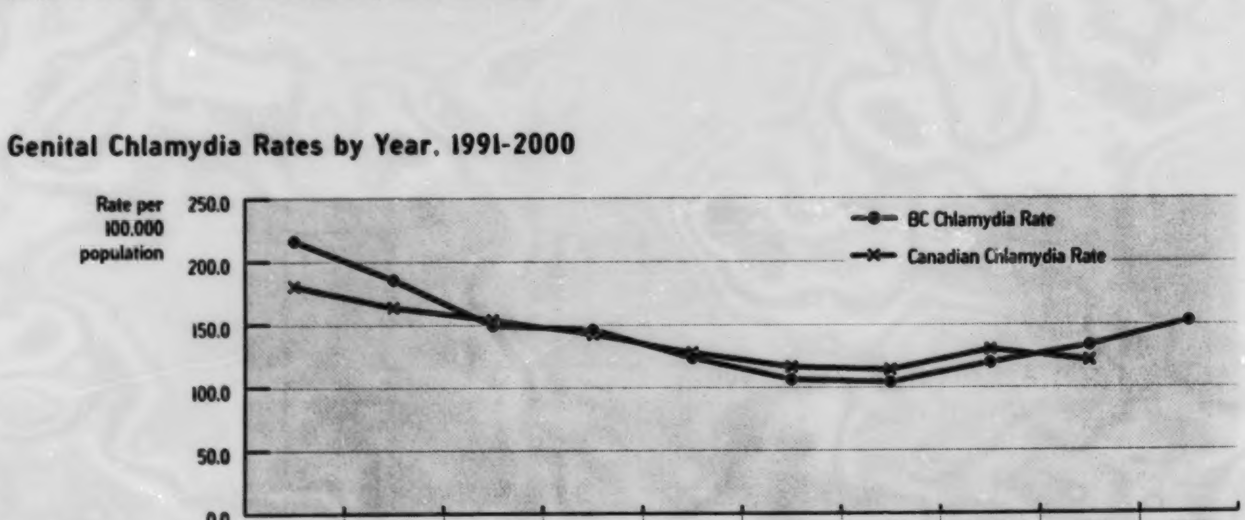
The rate of reported genital chlamydia infection increased 14.4% in 2000 to 152.3 per 100,000 population from 133.1 in 1999. This increase is slightly more than the 11.8% increase in the previous year.

The most significant geographical increase was a 107% rise in the Northern Interior Health Region. This dramatic increase was at least partially a result of a chlamydia public education program. Coast Garibaldi, East Kootenay, North Okanagan and South Okanagan Health Regions saw increases of over 50% as well.

Over half of all reported cases of chlamydia genital infection occurred in 15-24 year old females. Males 20-29 years old accounted for over 50% of male cases.

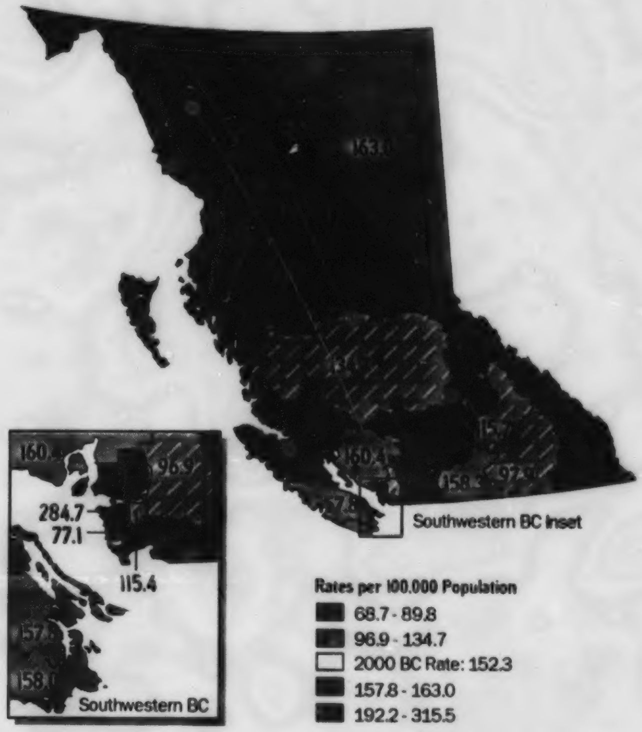
From 1993 through 2000 the BC chlamydia rates paralleled Canadian rates.

Genital Chlamydia Rates by Year, 1991-2000



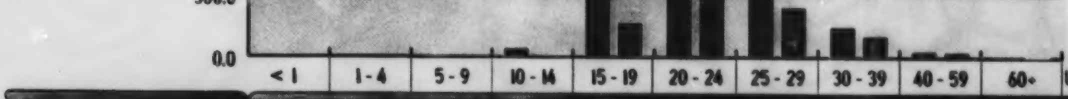
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Chlamydia [illegible]	7294	643[illegible]	532[illegible]	536[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Chlamydia Rate	216.2	185.4	149.0	145.7	123.1	106.0	103.9	119.3	133.[illegible]	152.3
Canad[illegible]	180.2	163.8	153.[illegible]	142.[illegible]	12[illegible]	11[illegible]	113[illegible]	[illegible]	[illegible]	[illegible]

Genital Chlamydia Rates by Health Region, 2000


163.0
160.4
96.9
284.7
77.1
115.4
157.8
158.0
134.7
157.8
97.9
158.3
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
68.7 - 89.8
96.9 - 134.7
2000 BC Rate: 152.3
157.8 - 163.0
192.2 - 315.5

HR	Health Region	Reports	Rate
1	East Kootenay	61	73.9
2	West Kootenay - Boundary	81	97.9
3	North Okanagan	138	115.7
4	South Okanagan - Similkameen	369	158.3
5	Thompson	293	212.9
6	Fraser Valley	172	70.7
7	South Fraser Valley	517	89.9
8	Simon Fraser	315	96.9
9	Coast Garibaldi	129	160.4
10	Central Vancouver Island	387	157.8
11	Upper Island/Central Coast	236	192.2
12	Cariboo	104	134.7
13	North West	197	214.2
14	Peace Liard	108	163.0
15	Northern Interior	423	315.5
16	Vancouver	1639	284.7
17	Burnaby	222	115.4
18	North Shore	124	68.7
19	Richmond	128	77.1
20	Capital	529	158.0

Genital Chlamydia Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Chlamydia Cases [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chlamydia Cases - Male	0	0	0	1	231	575	334	349	[illegible]	[illegible]	[illegible]	[illegible]
Chlamydia Cases - Unkn[illegible]	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cha[illegible]	9.9	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Chlamydia Rate - Male	0.0	0.0	0.0	0.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

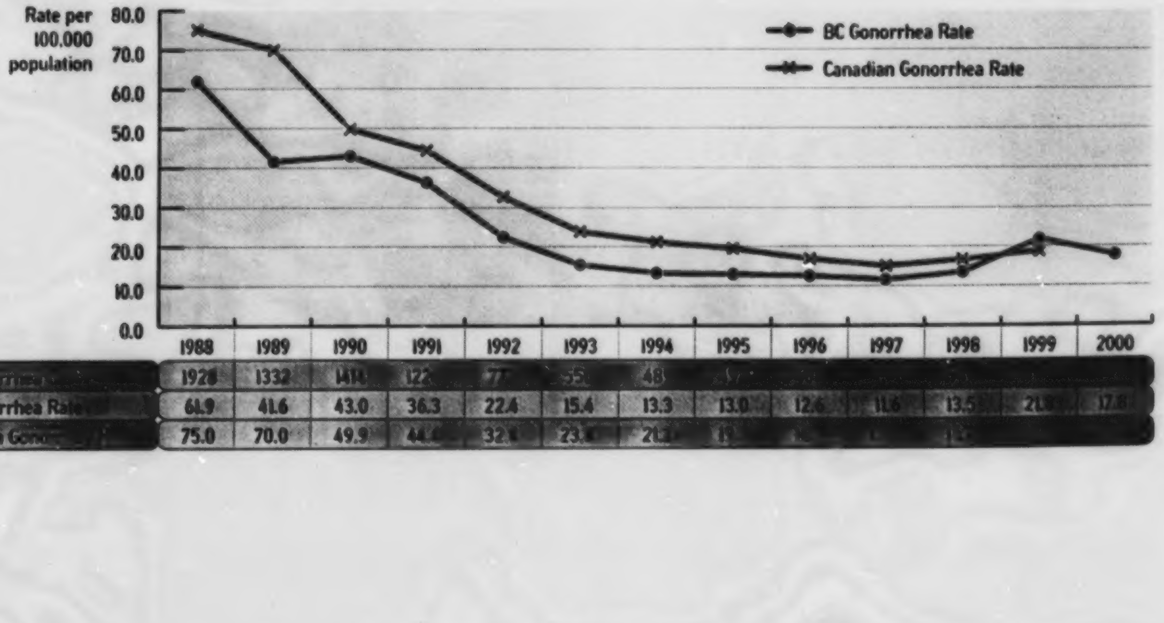
Gonorrhea

The gonorrhea rate for BC decreased by 17% in 2000, following the 61% increase in 1999. It is interesting to see that the BC gonorrhea rates paralleled Canadian rates up to and including 1998 but not in 1999. The number of cases of gonorrhea for BC decreased from 878 in 1999 to 724 in 2000. This is a decrease of 154 cases.

Most regions in BC had declining rates of gonorrhea in 2000 except for Coast Garibaldi and Thompson. The Vancouver/Richmond region had three times the rate per 100,000 population of any other region. This is most likely due to the concentration of core transmitter groups such as sex trade workers, street involved persons and men who have anonymous sex with men in bathhouses.

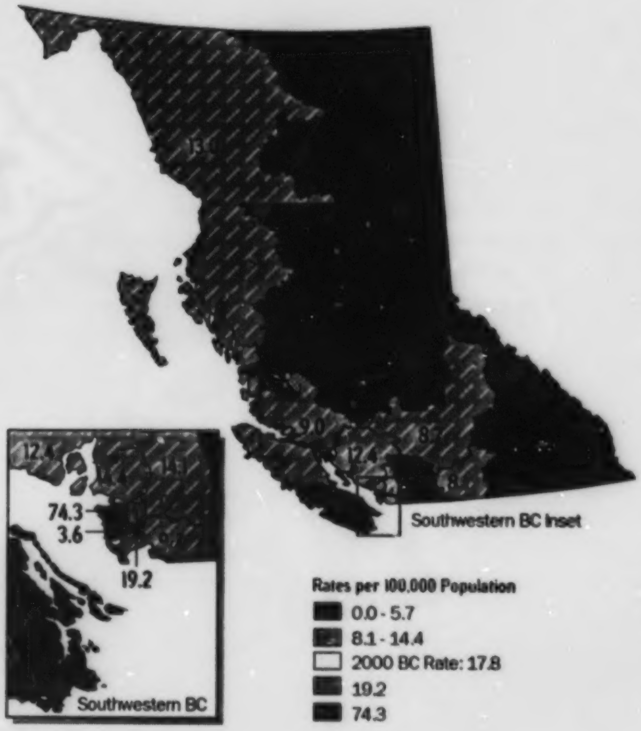
The age adjusted distribution for gonorrhea shows the typical pattern of most sexually transmitted diseases, the highest rates in females in the 15-24 age range and the highest rates in males in the 25-39 age range.

Gonorrhea Rates by Year, 1988-2000



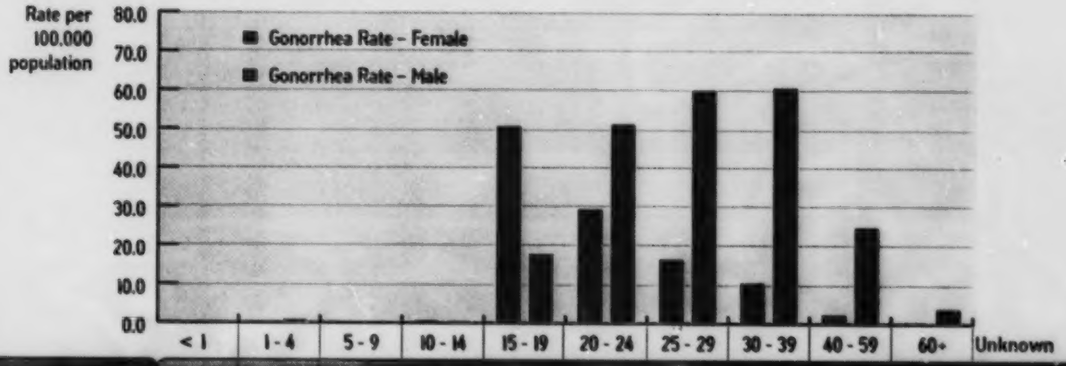
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Gonorr[illegible]	1928	1332	1414	122[illegible]	77[illegible]	55[illegible]	48[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Gonorrhea Rate	61.9	41.6	43.0	36.3	22.4	15.4	13.3	13.0	12.6	11.6	13.5	21.8	17.8
Canadian Gono[illegible]	75.0	70.0	49.9	44.[illegible]	32.[illegible]	23.[illegible]	21.[illegible]	19[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Gonorrhea Rates by Health Region, 2000


13.0
9.0
8.7
12.4
Southwestern BC Inset
12.4
14.1
74.3
3.6
9.7
19.2
Southwestern BC
Rates per 100,000 Population
0.0 - 5.7
8.1 - 14.4
2000 BC Rate: 17.8
19.2
74.3

HR	Health Region	Reports	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	5	4.2
4	South Okanagan - Similkameen	19	8.1
5	Thompson	12	8.7
6	Fraser Valley	11	4.5
7	South Fraser Valley	56	9.7
8	Simon Fraser	46	14.1
9	Coast Garibaldi	10	12.4
10	Central Vancouver Island	14	5.7
11	Upper Island/Central Coast	11	9.0
12	Cariboo	1	1.3
13	North West	12	13.0
14	Peace Liard	2	3.0
15	Northern Interior	2	1.5
16	Vancouver	428	74.3
17	Burnaby	37	19.2
18	North Shore	26	14.4
19	Richmond	6	3.6
20	Capital	16	4.8

Gonorrhea Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Gonorrhea [illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gonorrhea Cases – [illegible]	0	1	0	1	25	70	83	202	[illegible]	[illegible]	[illegible]	[illegible]
Gonorrhea Cases – [illegible]	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gonorrhea Ra[illegible]	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gonorrhea Ra[illegible]	0.0	1.1	0.0	0.7	[illegible]	51.5	60.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Gonorrhea

The gonorrhea rate for BC decreased by 17% in 2000, following the 61% increase in 1999. It is interesting to see that the BC gonorrhea rates paralleled Canadian rates up to and including 1998 but not in 1999. The number of cases of gonorrhea for BC decreased from 878 in 1999 to 724 in 2000. This is a decrease of 154 cases.

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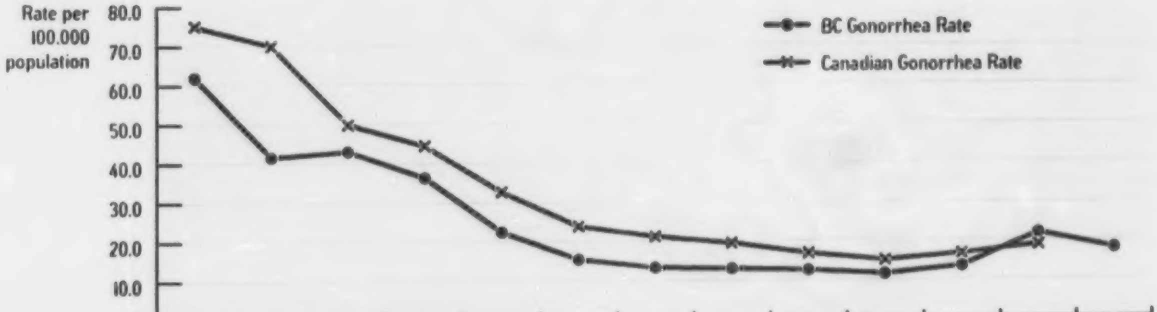
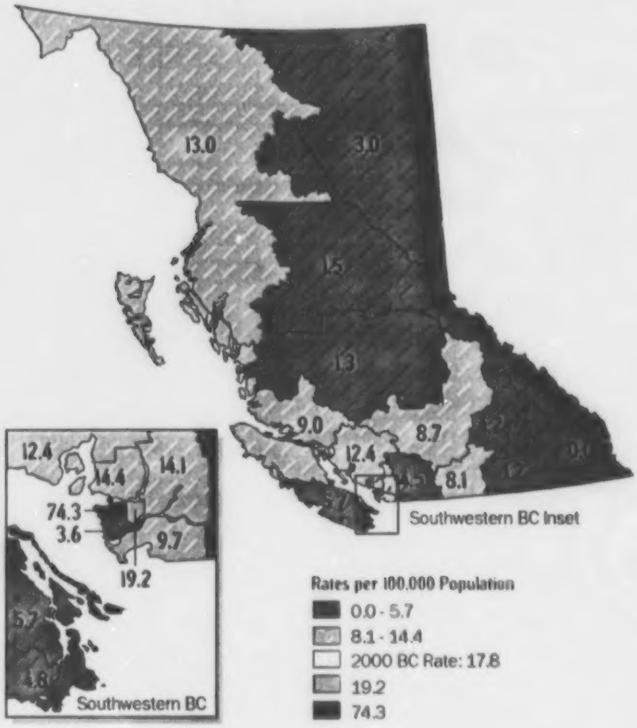
The age adjusted distribution for gonorrhea shows the typical pattern of most sexually transmitted diseases, the highest rates in females in the 15-24 age range and the highest rates in males in the 25-39 age range.

Gonorrhea Rates by Year, 1988-2000



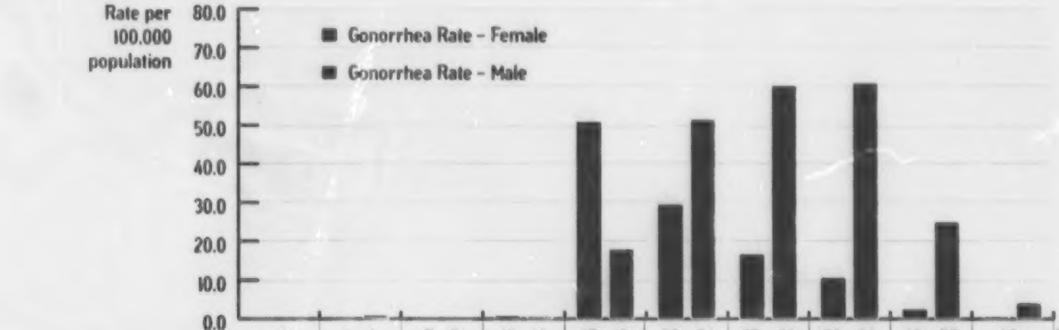
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Gonorrhea Cases	1928	1332	1414	1224	777	550	489	492	488	456	541	878	72[illegible]
BC Gonorrhea Rate	61.9	41.6	43.0	36.3	22.4	15.4	13.3	13.0	12.6	11.6	13.5	21.8	17.8
Canadian Gonorrhea Rate	75.0	70.0	49.9	44.4	32.6	23.8	21.2	19.5	16.9	15.1	16.7	18.8	

Gonorrhea Rates by Health Region, 2000


13.0
3.0
1.5
1.3
9.0
8.7
12.4
8.1
5.7
Southwestern BC Inset
12.4
14.4
14.1
74.3
3.6
9.7
19.2
5.7
4.8
Southwestern BC
Rates per 100,000 Population
0.0 - 5.7
8.1 - 14.4
2000 BC Rate: 17.8
19.2
74.3

HR	Health Region	Reports	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	5	4.2
4	South Okanagan - Similkameen	19	8.1
5	Thompson	12	8.7
6	Fraser Valley	11	4.5
7	South Fraser Valley	56	9.7
8	Simon Fraser	46	14.1
9	Coast Garibaldi	10	12.4
10	Central Vancouver Island	14	5.7
11	Upper Island/Central Coast	11	9.0
12	Cariboo	1	1.3
13	North West	12	13.0
14	Peace Liard	2	3.0
15	Northern Interior	2	1.5
16	Vancouver	428	74.3
17	Burnaby	37	19.2
18	North Shore	26	14.4
19	Richmond	6	3.6
20	Capital	16	4.8

Gonorrhea Rates by Age Group and Sex, 2000

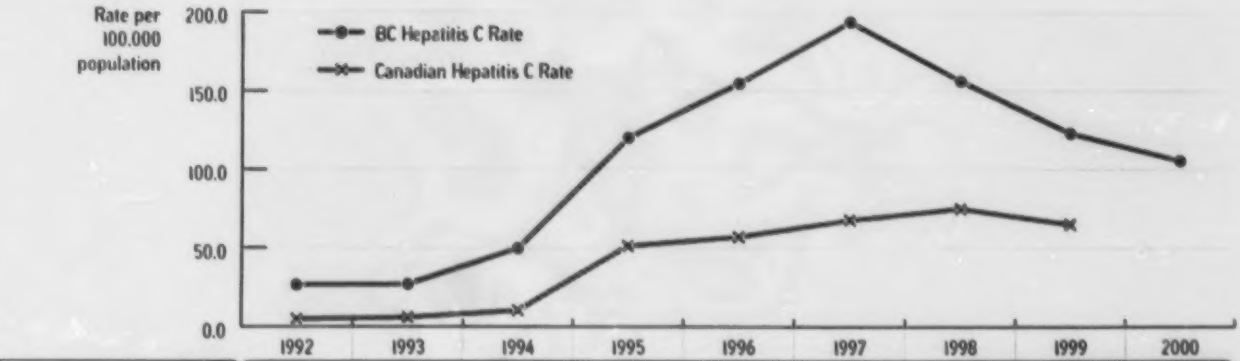


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Gonorrhea Cases - Female	0	0	0	1	67	39	23	35	[illegible]	[illegible]	[illegible]	[illegible]
Gonorrhea Cases - Male	0	1	0	1	25	70	83	202	145	13	0	540
Gonorrhea Cases - Unknown	0	0	0	0	1	0	0	0	0	0	[illegible]	[illegible]
Gonorrhea Rate - Female	0.0	0.0	0.0	0.8	50.9	29.5	16.8	10.7	[illegible]	[illegible]	[illegible]	[illegible]
Gonorrhea Rate - Male	0.0	1.1	0.0	0.7	18.0	51.5	60.2	60.9	25.0	4.1		26.7

Hepatitis C

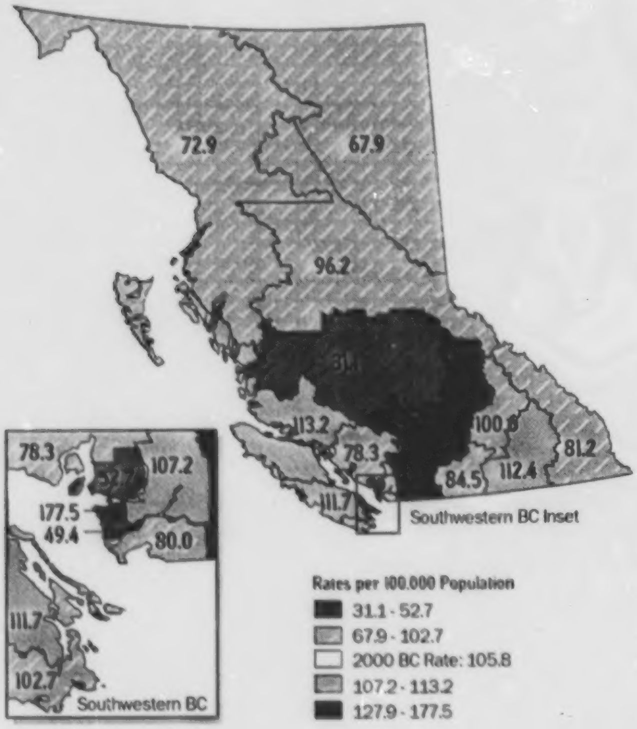
The rate of new reporting of antibody to hepatitis C has been declining in British Columbia since its peak in 1997 and reached 4,302 reports or 105.8 per 100,000 population in the year 2000. The highest rates of new reporting for hepatitis C were seen in the Fraser Valley and Vancouver Health Regions. Notably, the presence of hepatitis C antibody does not on its own indicate chronic infection. A small but significant portion of individuals who have become infected by hepatitis C and who have become antibody positive appear to clear the virus. Individuals who are newly diagnosed with anti hepatitis C antibody should be followed for further testing by their physicians.

Hepatitis C Rates by Year, 1992-2000



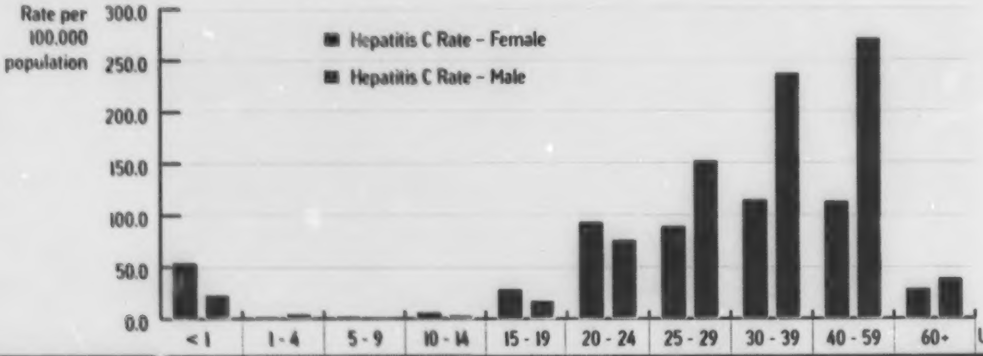
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Hepatitis C Cases	926	971	1836	4541	6005	7671	6251	[illegible]	430
BC Hepatitis C Rate	26.7	27.2	49.9	120.0	154.7	193.7	156.3	123.1	105.8
Can. Hepatitis C Rate	5.0	6.1	10.5	51.4	57.2	67.8	75.2	63.1	

Hepatitis C Rates by Health Region, 2000


72.9
67.9
96.2
31.1
113.2
78.3
100.6
81.2
84.5
112.4
111.7
Southwestern BC Inset
78.3
107.2
52.7
177.5
49.4
80.0
111.7
102.7
Southwestern BC
Rates per 100,000 Population
31.1 - 52.7
67.9 - 102.7
2000 BC Rate: 105.8
107.2 - 113.2
127.9 - 177.5

HR	Health Region	Cases	Rate
1	East Kootenay	67	81.2
2	West Kootenay - Boundary	93	112.4
3	North Okanagan	120	100.6
4	South Okanagan - Similkameen	197	84.5
5	Thompson	176	127.9
6	Fraser Valley	349	143.5
7	South Fraser Valley	461	80.0
8	Simon Fraser	555	107.2
9	Coast Garibaldi	63	78.3
10	Central Vancouver Island	274	111.7
11	Upper Island/Central Coast	139	113.2
12	Cariboo	24	31.1
13	North West	67	72.9
14	Peace Liard	45	67.9
15	Northern Interior	129	96.2
16	Vancouver	1022	177.5
18	North Shore	95	52.7
19	Richmond	82	49.4
20	Capital	344	102.7

Hepatitis C Rates by Age Group and Sex, 2000

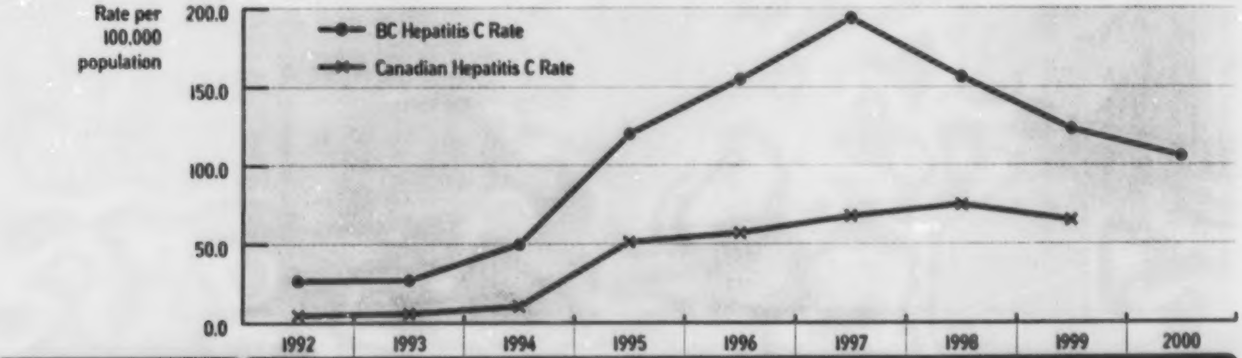


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Hepatitis C Cases – Female	11	2	3	8	38	124	123	377	65[illegible]	10[illegible]	[illegible]	[illegible]
Hepatitis C Cases – Male	5	5	0	5	25	104	211	787	1570	124	5	2841
Hepatitis C Cases – Unknown	0	0	0	0	0	0	0	1	5	[illegible]	[illegible]	[illegible]
Hepatitis C Rate – Female	54.3	2.3	2.5	6.3	28.9	93.9	89.6	114.8	113.5	28[illegible]		[illegible]
Hepatitis C Rate – Male	23.4	5.4	0.0	3.7	18.0	76.5	153.0	237.0	271.1	39.1		140.7

Hepatitis C

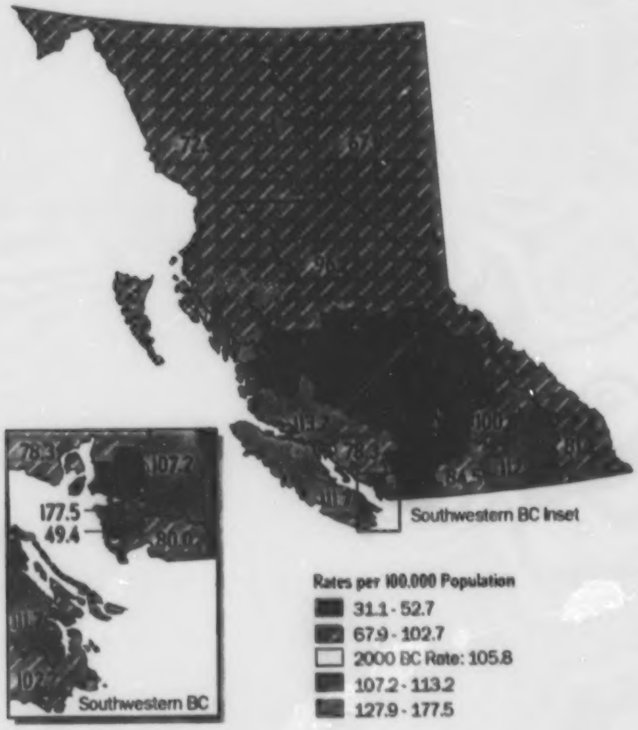
The rate of new reporting of antibody to hepatitis C has been declining in British Columbia since its peak in 1997 and reached 4,302 reports or 105.8 per 100,000 population in the year 2000. The highest rates of new reporting for hepatitis C were seen in the Fraser Valley and Vancouver Health Regions. Notably, the presence of hepatitis C antibody does not on its own indicate chronic infection. A small but significant portion of individuals who have become infected by hepatitis C and who have become antibody positive appear to clear the virus. Individuals who are newly diagnosed with anti hepatitis C antibody should be followed for further testing by their physicians.

Hepatitis C Rates by Year, 1992-2000



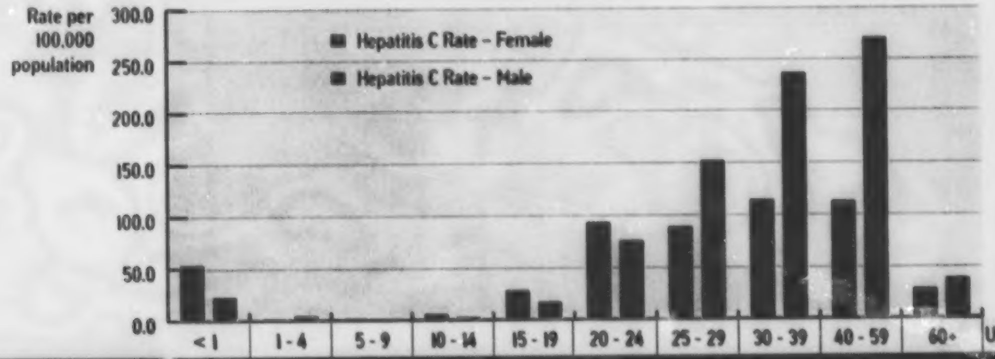
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Hepatitis C Cases	926	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Hepatitis C Rate	26.7	27.2	49.9	120.0	154.7	193.7	156.3	[illegible]	105.8
Can. Hepatitis C Rate	5.0	6.1	10.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Hepatitis C Rates by Health Region, 2000


72.9
67.9
96.2
113.2
78.3
100.6
81.2
84.5
111.7
78.3
107.2
177.5
49.4
80.0
111.7
102.7
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
31.1 - 52.7
67.9 - 102.7
2000 BC Rate: 105.8
107.2 - 113.2
127.9 - 177.5

HR	Health Region	Cases	Rate
1	East Kootenay	67	81.2
2	West Kootenay - Boundary	93	112.4
3	North Okanagan	120	100.6
4	South Okanagan - Similkameen	197	84.5
5	Thompson	176	127.9
6	Fraser Valley	349	143.5
7	South Fraser Valley	461	80.0
8	Simon Fraser	555	107.2
9	Coast Garibaldi	63	78.3
10	Central Vancouver Island	274	111.7
11	Upper Island/Central Coast	139	113.2
12	Cariboo	24	31.1
13	North West	67	72.9
14	Peace Liard	45	67.9
15	Northern Interior	129	96.2
16	Vancouver	1022	177.5
18	North Shore	95	52.7
19	Richmond	82	49.4
20	Capital	344	102.7

Hepatitis C Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Hepatitis [illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hepatitis C Cases - Male	5	5	0	5	25	104	211	781	1570	[illegible]	[illegible]	[illegible]
Hepatitis C Cases - [illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hepatitis C R[illegible]	54.3	2.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hepatitis C Rate [illegible]	23.4	5.4	0.0	3.7	18.0	76.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

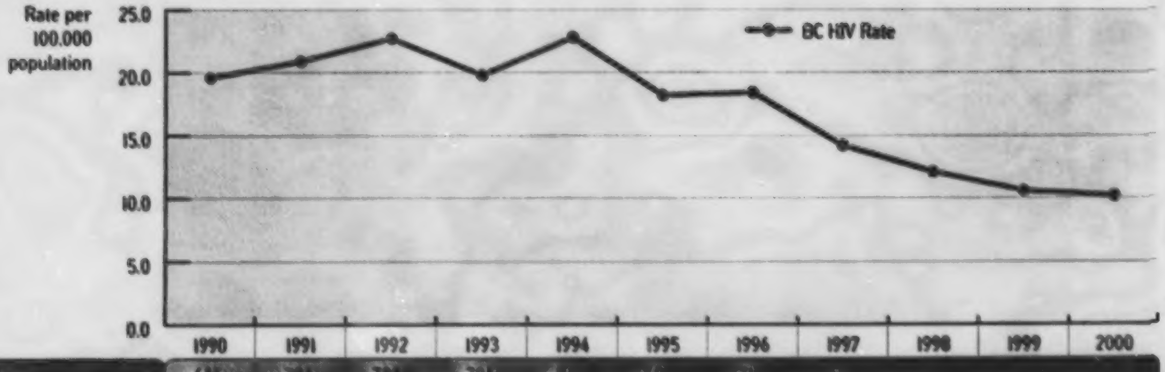
HIV

The rate of 10.2 per 100,000 population refers to the number of new positive HIV tests done in 2000. This rate has been declining steadily since it was 22.8 in 1994. The geographic region with the highest rate (42.0 per 100,000) is the City of Vancouver. All other regions have rates less than the provincial rate.

Males aged 30-39 had the highest age adjusted gender rates. Females aged 20-29 had the highest female age adjusted rates.

The Canadian rates are not available.

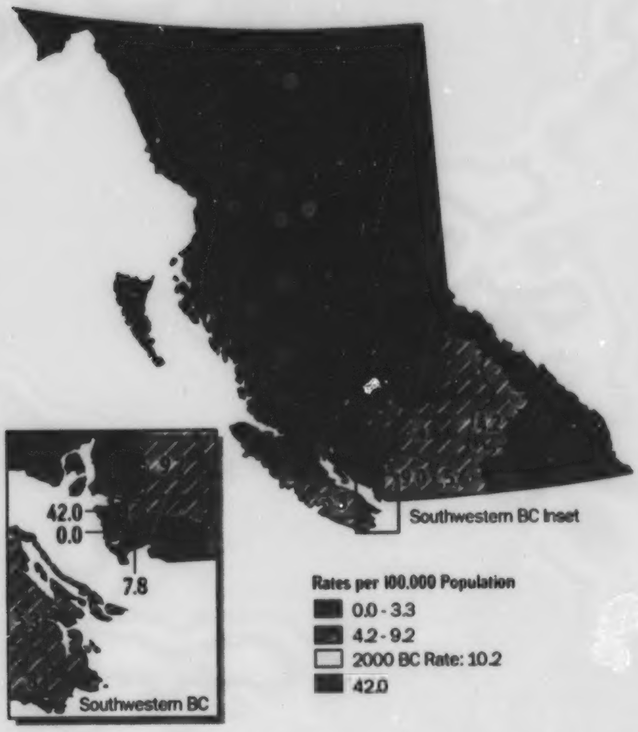
HIV Rates by Year, 1990-2000



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC HIV Cases	645	704	788	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC HIV Rate	19.6	20.9	22.7	19.8	22.8	18.2	18.4	[illegible]	[illegible]	[illegible]	10.2

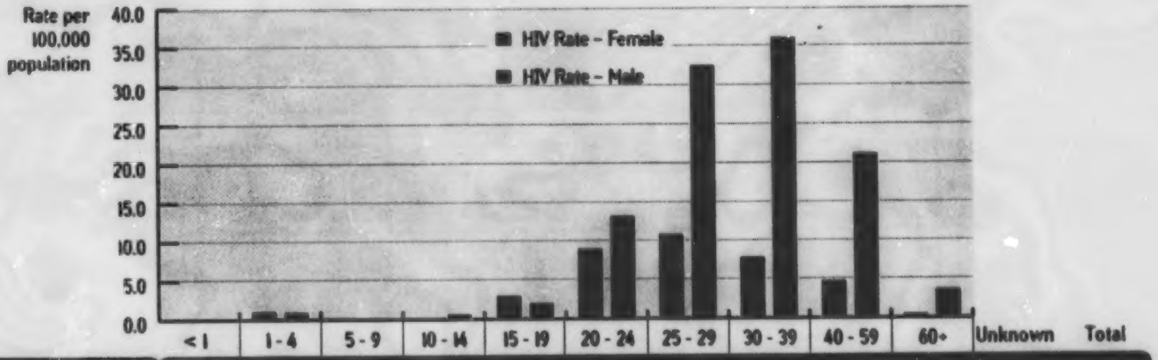
Not Nationally Notifiable

HIV Rates by Health Region, 2000


42.0
0.0
7.8
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0 - 3.3
4.2 - 9.2
2000 BC Rate: 10.2
42.0

HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	5	4.2
4	South Okanagan - Similkameen	13	5.6
5	Thompson	6	4.4
6	Fraser Valley	22	9.0
7	South Fraser Valley	19	3.3
8	Simon Fraser	30	9.2
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	13	5.3
11	Upper Island/Central Coast	3	2.4
12	Cariboo	2	2.6
13	North West	1	1.1
14	Peace Liard	2	3.0
15	Northern Interior	3	2.2
16	Vancouver	242	42.0
17	Burnaby	15	7.8
18	North Shore	6	3.3
19	Richmond	0	0.0
20	Capital	27	8.1

HIV Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
HIV [illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HIV Cases – Ma[illegible]	0	1	0	1	3	[illegible]	45	120	[illegible]	[illegible]	[illegible]	[illegible]
HIV [illegible] Unknow[illegible]	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HI[illegible]	0.0	[illegible]	0[illegible]	0[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HIV R[illegible]	0.0	1.0	0.0	0.7	2.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

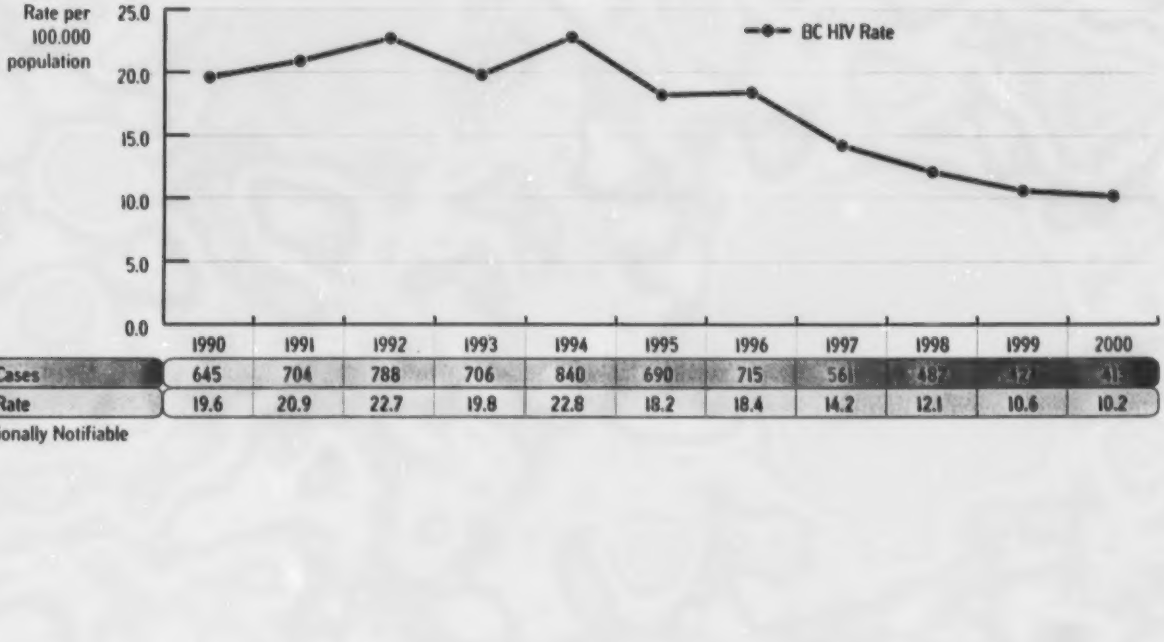
HIV

The rate of 10.2 per 100,000 population refers to the number of new positive HIV tests done in 2000. This rate has been declining steadily since it was 22.8 in 1994. The geographic region with the highest rate (42.0 per 100,000) is the City of Vancouver. All other regions have rates less than the provincial rate.

Males aged 30-39 had the highest age adjusted gender rates. Females aged 20-29 had the highest female age adjusted rates.

The Canadian rates are not available.

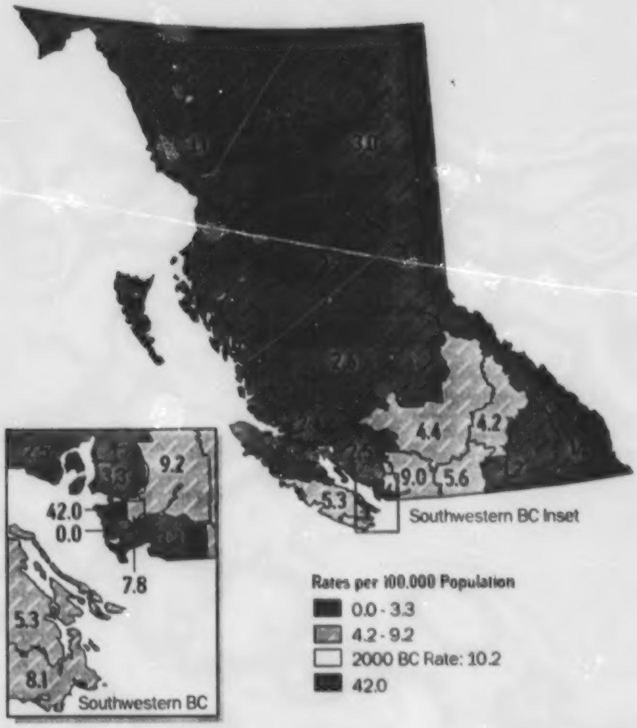
HIV Rates by Year, 1990-2000



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC HIV Cases	645	704	788	706	840	690	715	561	487	[illegible]	[illegible]
BC HIV Rate	19.6	20.9	22.7	19.8	22.8	18.2	18.4	14.2	12.1	10.6	10.2

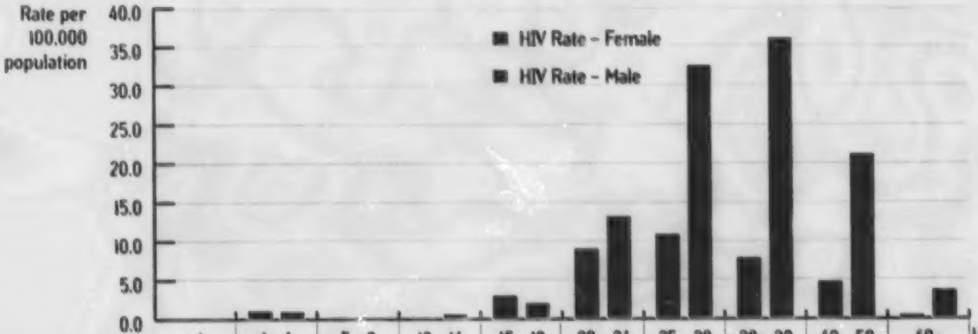
Not Nationally Notifiable

HIV Rates by Health Region, 2000


3.0
2.6
4.4
4.2
9.0
5.6
5.3
Southwestern BC Inset
9.2
3.3
42.0
0.0
7.8
5.3
8.1
Southwestern BC
Rates per 100,000 Population
■ 0.0 - 3.3
▨ 4.2 - 9.2
☐ 2000 BC Rate: 10.2
■ 42.0

HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	5	4.2
4	South Okanagan - Similkameen	13	5.6
5	Thompson	6	4.4
6	Fraser Valley	22	9.0
7	South Fraser Valley	19	3.3
8	Simon Fraser	30	9.2
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	13	5.3
11	Upper Island/Central Coast	3	2.4
12	Cariboo	2	2.6
13	North West	1	1.1
14	Peace Liard	2	3.0
15	Northern Interior	3	2.2
16	Vancouver	242	42.0
17	Burnaby	15	7.8
18	North Shore	6	3.3
19	Richmond	0	0.0
20	Capital	27	8.1

HIV Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
HIV Cases - Female	0	1	0	0	4	12	15	26	[illegible]	[illegible]	[illegible]	[illegible]
HIV Cases - Male	0	1	0	1	3	18	45	120	123	12	1	324
HIV Cases - Unknown	0	0	0	0	0	0	0	0	0	[illegible]	[illegible]	0
HIV Rate - Female	0.0	1.1	0.0	0.0	3.0	9.1	10.9	7.9	[illegible]	[illegible]	[illegible]	[illegible]
HIV Rate - Male	0.0	1.0	0.0	0.7	2.2	13.2	32.6	36.1	21.2	3.8		16.0

Infectious Syphilis

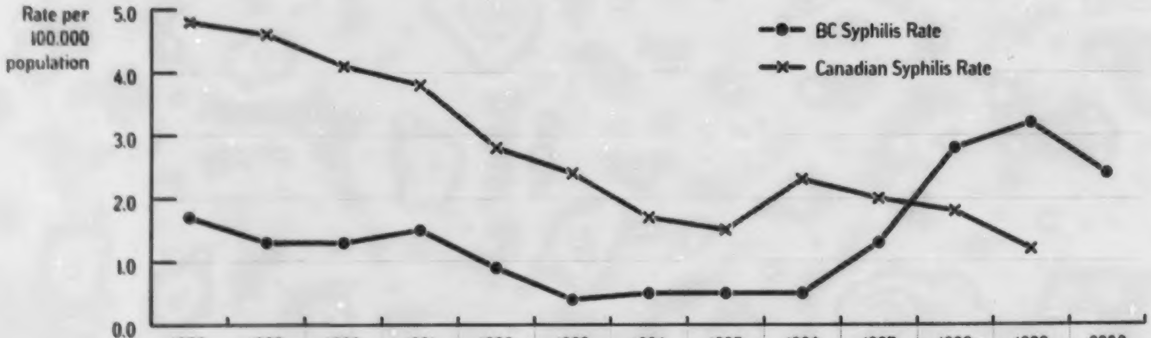
The outbreak of infectious syphilis continued through 2000 in the Lower Mainland, especially Vancouver's Downtown Eastside. The overall provincial rate decreased to 2.4 per 100,000 population in 2000, from 3.2 in 1999 and 2.8 in 1998. The rate for Vancouver/Richmond is 11.5 per 100,000 population which is a slight decrease from 14.2 in 1998. Most regions adjacent to Vancouver/Richmond experienced small rate decreases in 2000 as well.

In 1998-2000, the BC syphilis rates were much higher than the Canadian rates.

Age adjusted syphilis rates showed higher incidence in the 30-59 age groups for males and in the 20-24 and 30-34 age groups for females.

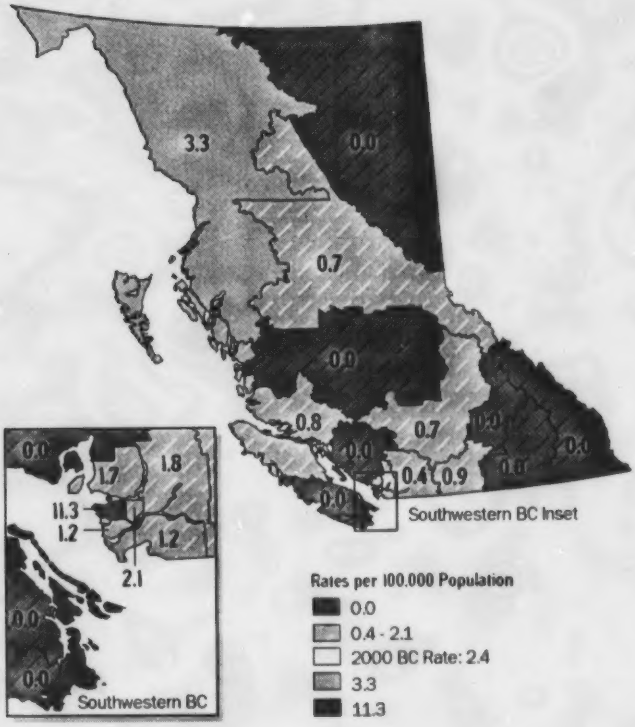
Infectious syphilis includes primary, secondary, early latent syphilis and early congenital syphilis.

Infectious Syphilis Rates by Year, 1988-2000



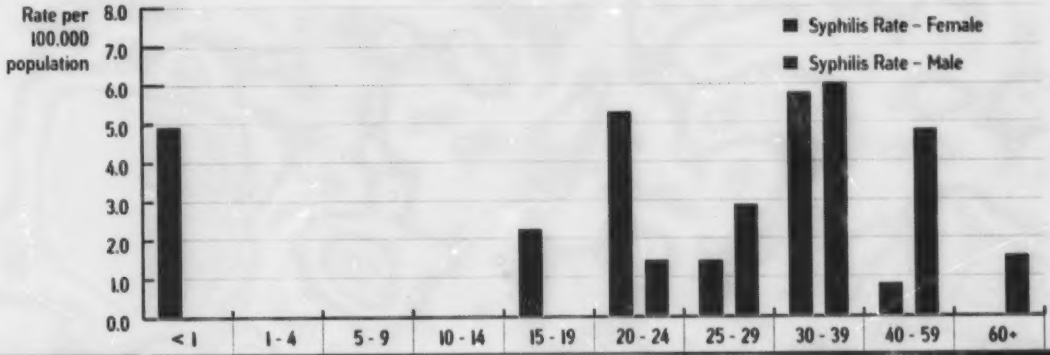
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Syphilis Cases	53	42	42	50	30	16	17	18	18	50	112	127	9
BC Syphilis Rate	1.7	1.3	1.3	1.5	0.9	0.4	0.5	0.5	0.5	1.3	2.8	3.2	2.4
Canadian Syphilis Rate	4.8	4.6	4.1	3.8	2.8	2.4	1.7	1.5	2.3	2.0	1.8	1.2	

Infectious Syphilis Rates by Health Region, 2000


3.3
0.0
0.7
0.0
0.8
0.7
0.0
0.0
0.0
0.0
0.4
0.9
0.0
0.0
1.7
1.8
11.3
1.2
1.2
2.1
0.0
0.0
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
0.4 - 2.1
2000 BC Rate: 2.4
3.3
11.3

HR	Health Region	Reports	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	2	0.9
5	Thompson	1	0.7
6	Fraser Valley	1	0.4
7	South Fraser Valley	7	1.2
8	Simon Fraser	6	1.8
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	1	0.8
12	Cariboo	0	0.0
13	North West	3	3.3
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	65	11.3
17	Burnaby	4	2.1
18	North Shore	3	1.7
19	Richmond	2	1.2
20	Capital	0	0.0

Infectious Syphilis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Syphilis Cases – Femal	1	0	0	0	3	7	2	19	5	[illegible]	[illegible]
Syphilis Cases – Male	0	0	0	0	0	2	4	20	28	5	59
Syphilis Cases – Unknown	0	0	0	0	0	0	0	0	0	0	0
Syphilis Rate – Female	4.9	0.0	0.0	0.0	2.3	5.3	1.5	5.8	0.9	[illegible]	[illegible]
Syphilis Rate – Male	0.0	0.0	0.0	0.0	0.0	1.5	2.9	6.0	4.8	1.6	2.9

Infectious Syphilis

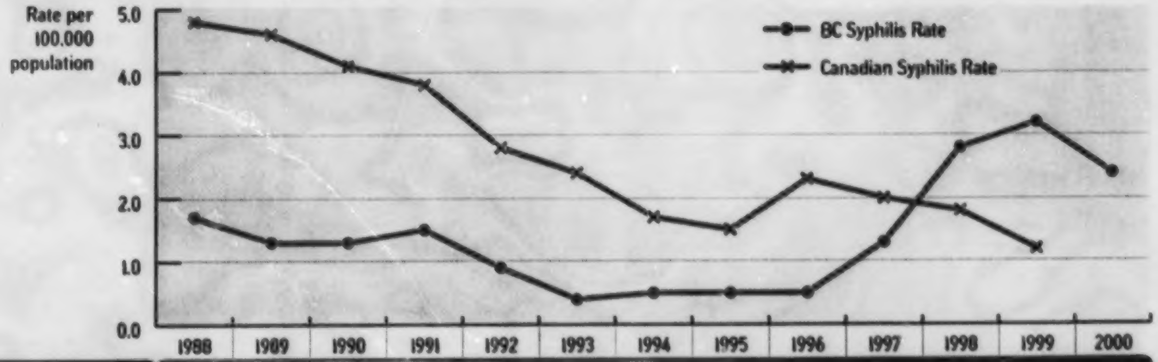
The outbreak of infectious syphilis continued through 2000 in the Lower Mainland, especially Vancouver's Downtown Eastside. The overall provincial rate decreased to 2.4 per 100,000 population in 2000, from 3.2 in 1999 and 2.8 in 1998. The rate for Vancouver/Richmond is 11.5 per 100,000 population which is a slight decrease from 14.2 in 1998. Most regions adjacent to Vancouver/Richmond experienced small rate decreases in 2000 as well.

In 1998-2000, the BC syphilis rates were much higher than the Canadian rates.

Age adjusted syphilis rates showed higher incidence in the 30-59 age groups for males and in the 20-24 and 30-34 age groups for females.

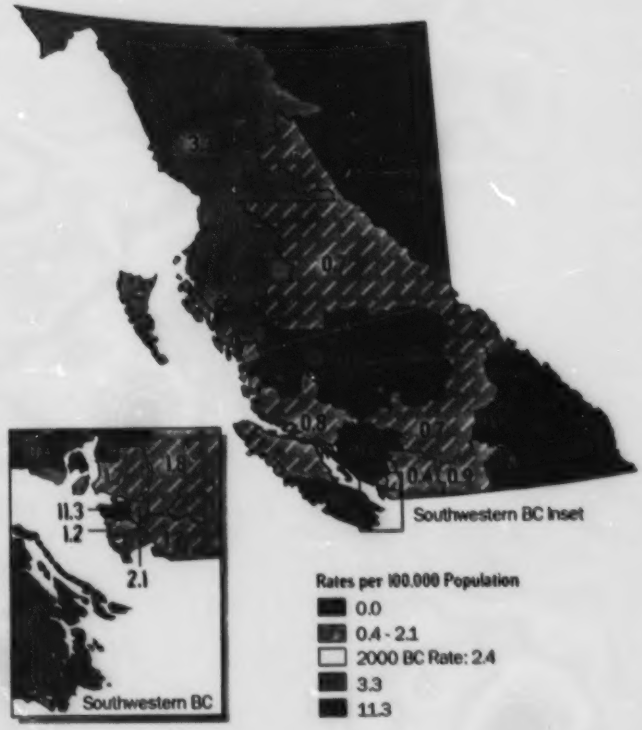
Infectious syphilis includes primary, secondary, early latent syphilis and early congenital syphilis.

Infectious Syphilis Rates by Year, 1988-2000



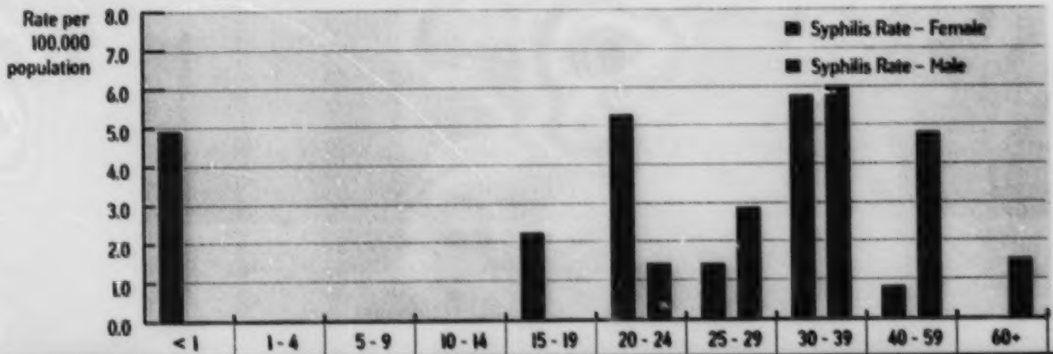
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Syphilis Cases	53	47	42	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Syphilis Rate	1.7	1.3	1.3	1.5	0.9	0.4	0.5	0.5	0.5	1.3	2.8	3.2	2.4
Canadian Syphilis Rate	4.8	4.6	4.1	3.8	2.8	[illegible]	1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Infectious Syphilis Rates by Health Region, 2000


3.3
0
0.8
0.7
0.4
0.9
1.8
11.3
1.2
2.1
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0
0.4 - 2.1
2000 BC Rate: 2.4
3.3
11.3

HR	Health Region	Reports	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	2	0.9
5	Thompson	1	0.7
6	Fraser Valley	1	0.4
7	South Fraser Valley	7	1.2
8	Simon Fraser	6	1.8
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	1	0.8
12	Cariboo	0	0.0
13	North West	3	3.3
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	65	11.3
17	Burnaby	4	2.1
18	North Shore	3	1.7
19	Richmond	2	1.2
20	Capital	0	0.0

Infectious Syphilis Rates by Age Group and Sex, 2000



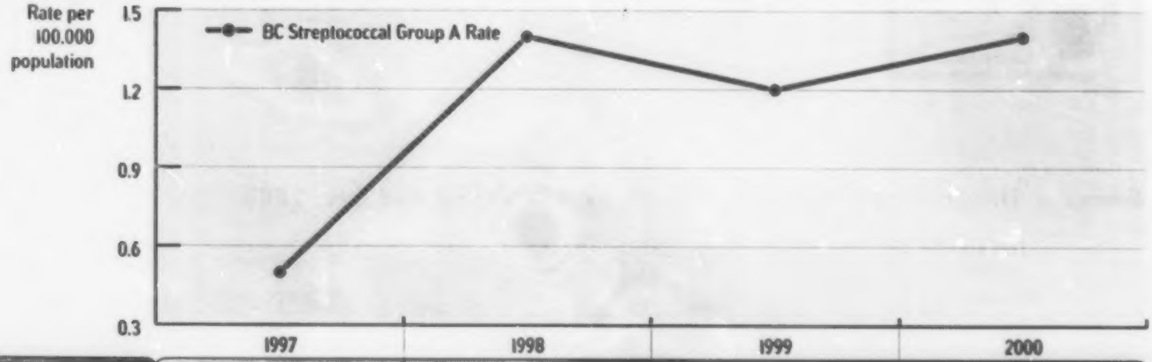
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Syphilis Cases – Female	1	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Syphilis Cases – Male	0	0	0	0	0	2	4	20	[illegible]	[illegible]	[illegible]
Syphilis Cases – Unknown	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Syphilis Rate – Female	4.9	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Syphilis Rate – Male	0.0	0.0	0.0	0.0	0.0	1.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Diseases Transmitted by Direct Contact and Respiratory Routes

Group A Streptococcus (Invasive)

The rate of reporting of invasive group A streptococcal disease during the year 2000 was 1.4 per 100,000 population. Of the 57 invasive cases, 18 or 32% represented necrotising fasciitis, while the remainder were comprised of other presentations such as septicemia, superficial cellulitis, pneumonia, toxic shock syndrome, puerperal fever, arthritis and other manifestations. Regions seeing rates slightly above the provincial median included the North Okanagan, Thompson, Fraser Valley, South Fraser Valley, Simon Fraser, Upper Island, North Shore and Capital Health Region. Cases were broadly distributed by age and gender.

Group A Streptococcus (Invasive) Rates by Year, 1997-2000



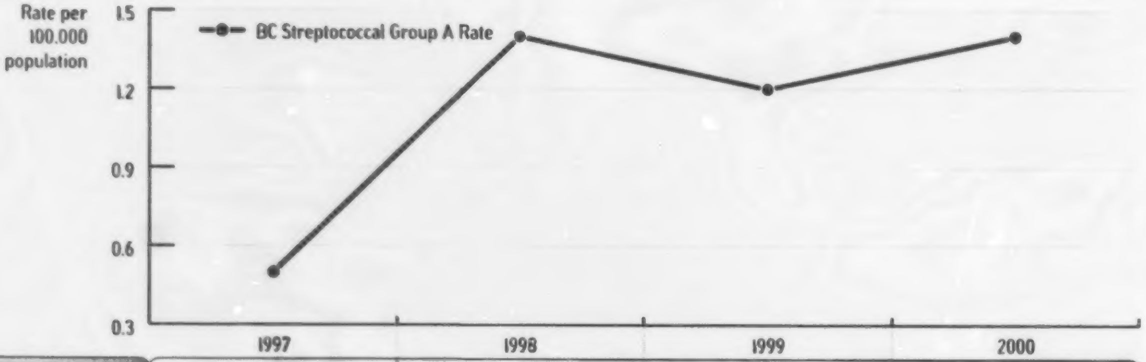
	1997	1998	1999	2000
BC Streptococcal Group A Cases	20	57	5[illegible]	[illegible]
BC Streptococcal Group A Rate	0.5	1.4	1.2	[illegible]

Canadian Rate Unavailable

Group A Streptococcus (Invasive)

The rate of reporting of invasive group A streptococcal disease during the year 2000 was 1.4 per 100,000 population. Of the 57 invasive cases, 18 or 32% represented necrotising fasciitis, while the remainder were comprised of other presentations such as septicemia, superficial cellulitis, pneumonia, toxic shock syndrome, puerperal fever, arthritis and other manifestations. Regions seeing rates slightly above the provincial median included the North Okanagan, Thompson, Fraser Valley, South Fraser Valley, Simon Fraser, Upper Island, North Shore and Capital Health Region. Cases were broadly distributed by age and gender.

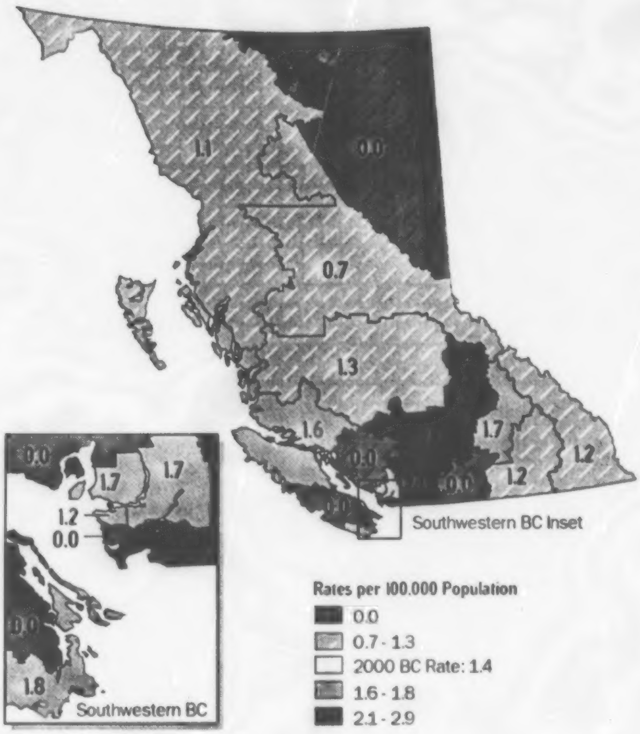
Group A Streptococcus (Invasive) Rates by Year, 1997-2000



	1997	1998	1999	2000
BC Streptococcal Group A Cases	20	57	50	57
BC Streptococcal Group A Rate	0.5	1.4	1.2	1.4

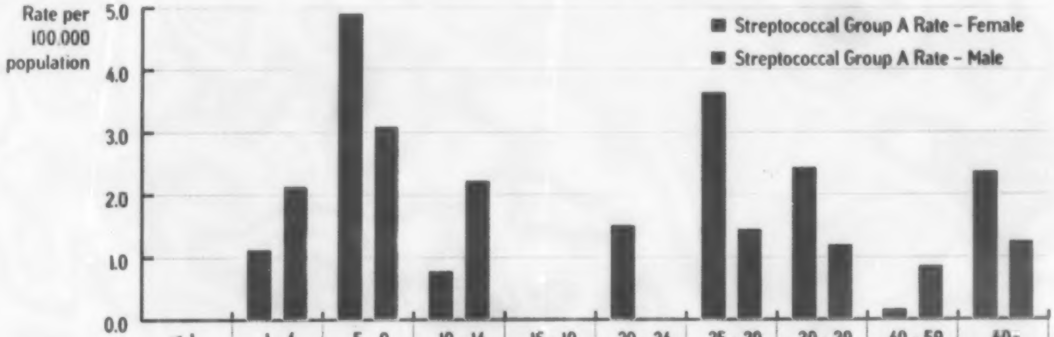
Canadian Rate Unavailable

Group A Streptococcus (Invasive) Rates by Health Region, 2000


1.1
0.0
0.7
1.3
1.6
0.0
1.7
1.2
1.2
0.0
0.0
Southwestern BC Inset
0.0
1.7
1.7
1.2
0.0
0.0
1.8
Southwestern BC
Rates per 100,000 Population
0.0
0.7 - 1.3
2000 BC Rate: 1.4
1.6 - 1.8
2.1 - 2.9

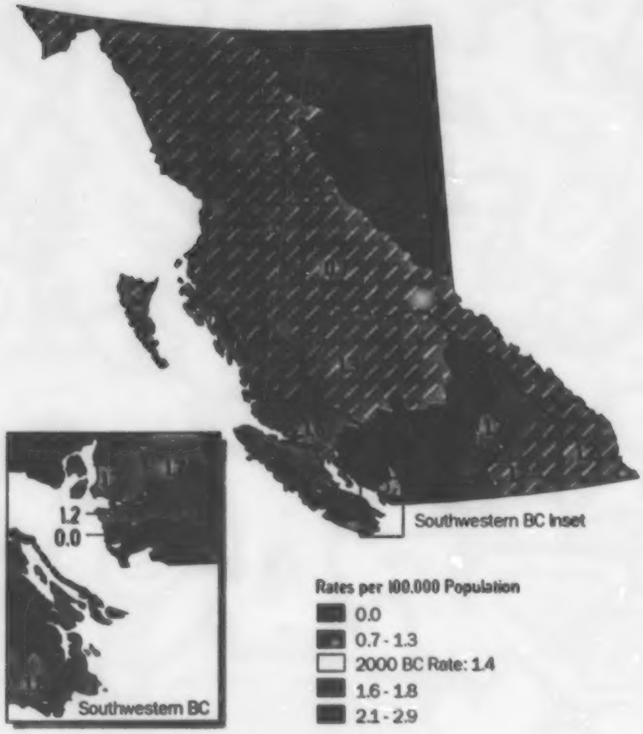
HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	2	1.7
4	South Okanagan - Similkameen	0	0.0
5	Thompson	4	2.9
6	Fraser Valley	5	2.1
7	South Fraser Valley	14	2.4
8	Simon Fraser	9	1.7
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	2	1.6
12	Cariboo	1	1.3
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	7	1.2
18	North Shore	3	1.7
19	Richmond	0	0.0
20	Capital	6	1.8

Group A Streptococcus (Invasive) Rates by Age Group and Sex, 2000



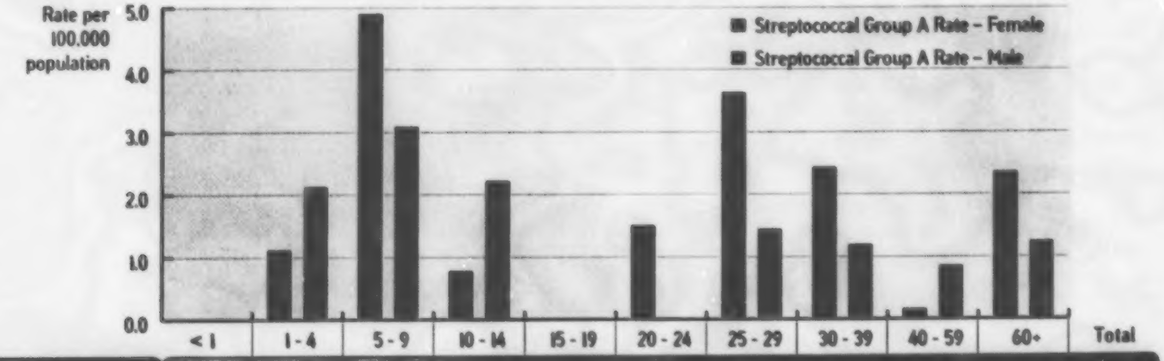
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Streptococcal Group A Cases - Fem[illegible]	0	1	6	1	0	2	5	6	[illegible]	[illegible]	[illegible]
Streptococcal Group A Cases - Male	0	2	4	3	0	0	2	4	5	4	24
Streptococcal Group A Rate - Fem[illegible]	0.0	1.1	4.9	0.8	0.0	1.5	3.6	[illegible]	[illegible]	[illegible]	[illegible]
Streptococcal Group A Rate - Male	0.0	2.1	3.1	2.2	0.0	0.0	1.5	1.2	0.9	1.3	1.2

Group A Streptococcus (Invasive) Rates by Health Region, 2000


1.2
0.0
Southwestern BC
Southwestern BC Inset
Rates per 100.000 Population
0.0
0.7 - 1.3
2000 BC Rate: 1.4
1.6 - 1.8
2.1 - 2.9

HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	2	1.7
4	South Okanagan - Similkameen	0	0.0
5	Thompson	4	2.9
6	Fraser Valley	5	2.1
7	South Fraser Valley	14	2.4
8	Simon Fraser	9	1.7
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	2	1.6
12	Cariboo	1	1.3
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	7	1.2
18	North Shore	3	1.7
19	Richmond	0	0.0
20	Capital	6	1.8

Group A Streptococcus (Invasive) Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Streptococcal Group A [illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Streptococcal Group A Cases - [illegible]	0	2	4	3	0	0	2	[illegible]	[illegible]	[illegible]	[illegible]
Streptococcal [illegible]	0.0	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Streptococcal Group A Rate - [illegible]	0.0	2.1	3.1	2.2	0.0	0.0	1.5	[illegible]	[illegible]	[illegible]	[illegible]

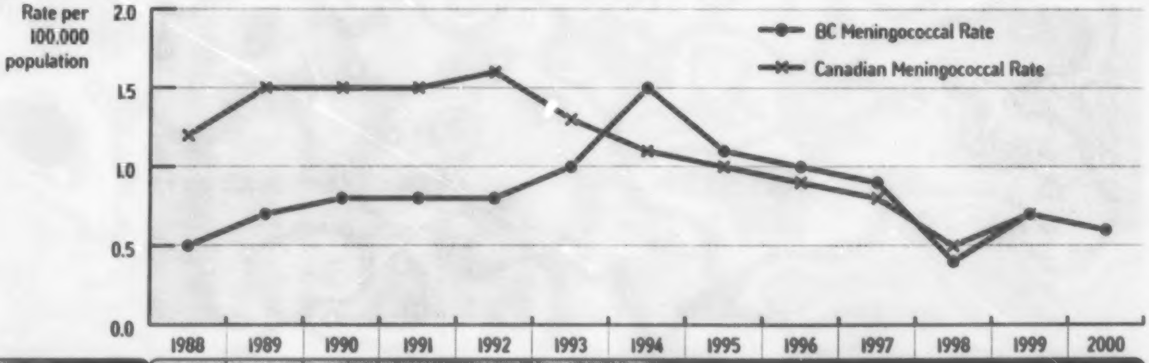
Leprosy

Leprosy is an uncommon diagnosis in British Columbia. One newly diagnosed case was reported during 2000.

Meningococcal Disease (Invasive)

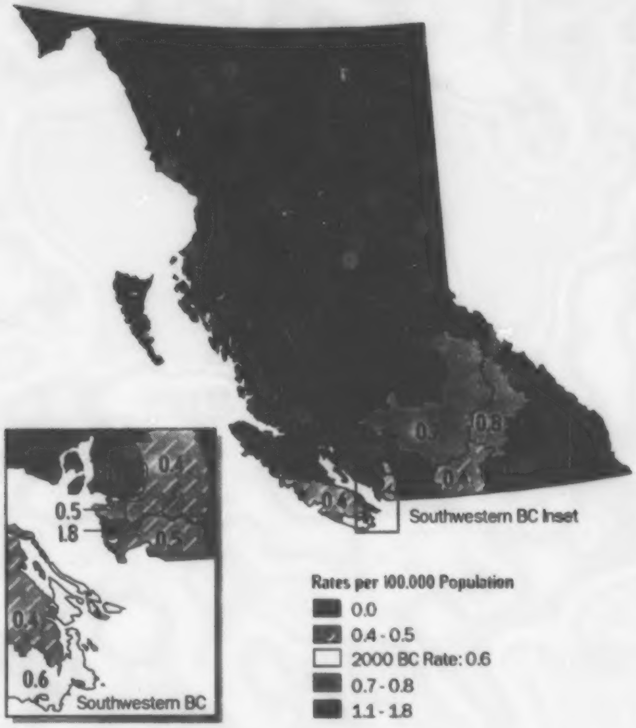
The year 2000 was an average year for invasive meningococcal disease in British Columbia with 24 cases reported for a rate of 0.6 per 100,000 population. During 2000, these cases were broadly distributed around the province. However, in December 2000, a case of serogroup C disease was diagnosed in Abbotsford which later proved to be the initial case in a cluster which was to become fully identified during 2001. The highest rates were experienced in infants followed by those between the ages of 15 and 30. Overall case fatality was 21% with a trend towards higher case fatality for serogroup C disease.

Meningococcal Disease (Invasive) Rates by Year, 1988-2000



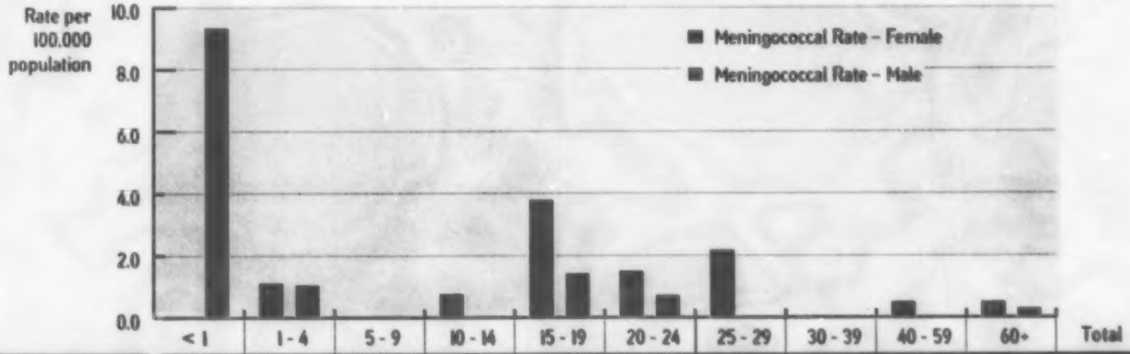
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Meningococcal [illegible]	16	22	26	28	29	37	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Meningococcal Rate	0.5	0.7	0.8	0.8	0.8	1.0	1.5	1.1	1.0	0.9	0.4	0.7	0.6
Canadian Meningococcal [illegible]	1.2	1.5	1.5	1.5	1.6	1.3	1.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Meningococcal Disease (Invasive) Rates by Health Region, 2000


0.7
0.8
0.4
0.4
Southwestern BC Inset
0.4
0.5
1.8
0.5
0.4
0.6
Southwestern BC
Rates per 100,000 Population
0.0
0.4 - 0.5
2000 BC Rate: 0.6
0.7 - 0.8
1.1 - 1.8

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	1	0.4
5	Thompson	1	0.7
6	Fraser Valley	3	1.2
7	South Fraser Valley	3	0.5
8	Simon Fraser	2	0.4
9	Coast Garibaldi	1	1.2
10	Central Vancouver Island	1	0.4
11	Upper Island/Central Coast	0	0.0
12	Cariboo	1	1.3
13	North West	1	1.1
14	Peace Liard	1	1.5
15	Northern Interior	0	0.0
16	Vancouver	3	0.5
18	North Shore	0	0.0
19	Richmond	3	1.8
20	Capital	2	0.6

Meningococcal Disease (Invasive) Rates by Age Group and Sex, 2000

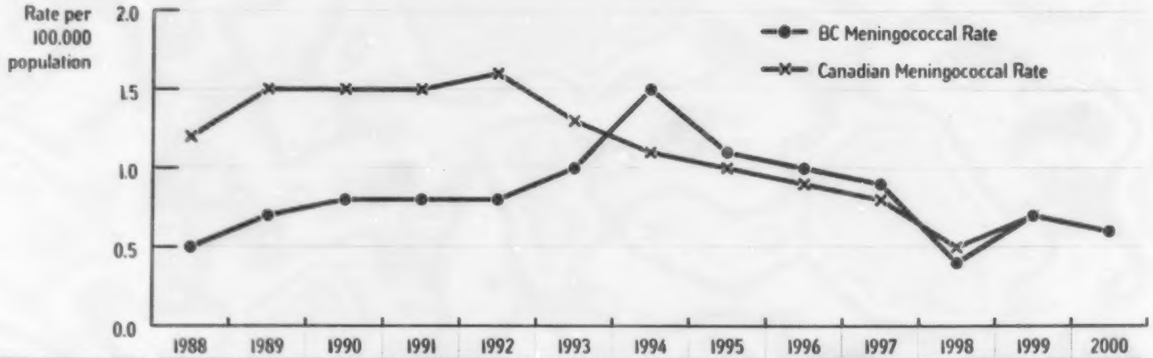


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Meningococcal Cases - Female	0	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Meningococcal Cases - Male	2	1	0	0	2	1	0	0	0	[illegible]	[illegible]
Meningococcal Rate - Female	0.0	1.1	0.0	[illegible]	[illegible]	1.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Meningococcal Rate - Male	9.4	1.1	0.0	0.0	1.4	0.7	0.0	0.0	0.0	[illegible]	[illegible]

Meningococcal Disease (Invasive)

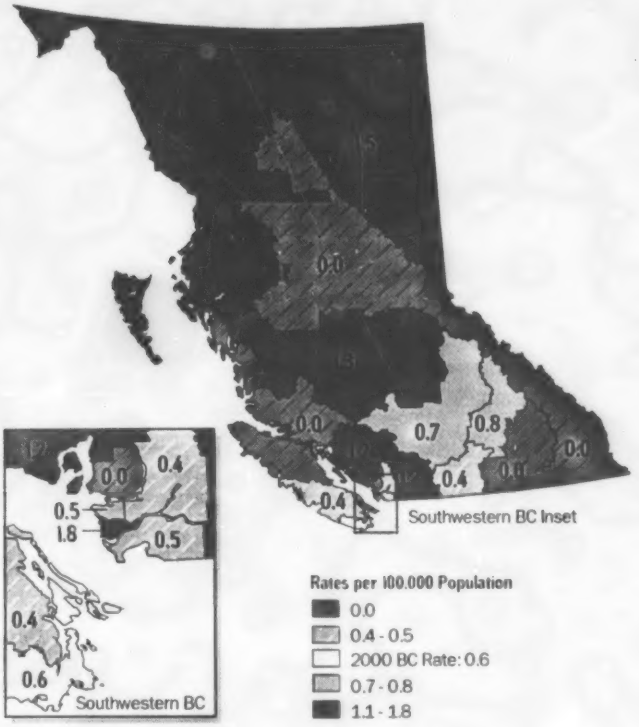
The year 2000 was an average year for invasive meningococcal disease in British Columbia with 24 cases reported for a rate of 0.6 per 100,000 population. During 2000, these cases were broadly distributed around the province. However, in December 2000, a case of serogroup C disease was diagnosed in Abbotsford which later proved to be the initial case in a cluster which was to become fully identified during 2001. The highest rates were experienced in infants followed by those between the ages of 15 and 30. Overall case fatality was 21% with a trend towards higher case fatality for serogroup C disease.

Meningococcal Disease (Invasive) Rates by Year, 1988-2000



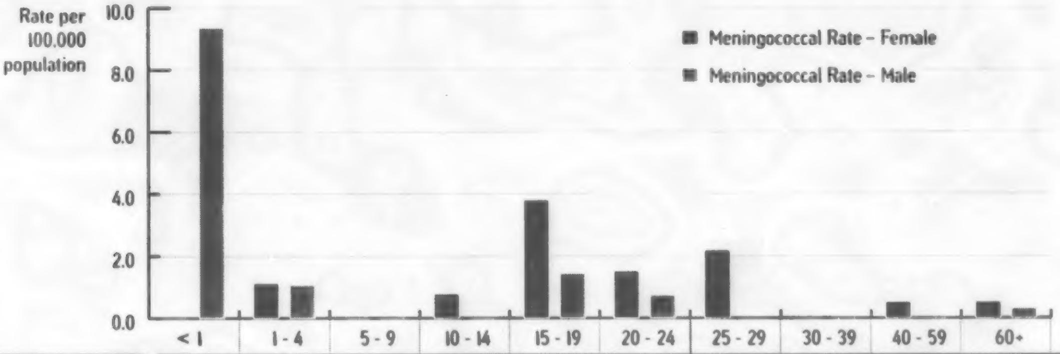
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Meningococcal Cases	16	22	26	28	29	37	54	40	40	35	15	28	24
BC Meningococcal Rate	0.5	0.7	0.8	0.8	0.8	1.0	1.5	1.1	1.0	0.9	0.4	0.7	0.6
Canadian Meningococcal Rate	1.2	1.5	1.5	1.5	1.6	1.3	1.1	1.0	0.9	0.8	0.5	0.7	

Meningococcal Disease (Invasive) Rates by Health Region, 2000


0.0
1.3
0.0
0.7
0.8
0.0
0.4
0.0
0.4
0.0
0.4
0.5
1.8
0.5
0.4
0.6
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
0.4 - 0.5
2000 BC Rate: 0.6
0.7 - 0.8
1.1 - 1.8

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	1	0.4
5	Thompson	1	0.7
6	Fraser Valley	3	1.2
7	South Fraser Valley	3	0.5
8	Simon Fraser	2	0.4
9	Coast Garibaldi	1	1.2
10	Central Vancouver Island	1	0.4
11	Upper Island/Central Coast	0	0.0
12	Cariboo	1	1.3
13	North West	1	1.1
14	Peace Liard	1	1.5
15	Northern Interior	0	0.0
16	Vancouver	3	0.5
18	North Shore	0	0.0
19	Richmond	3	1.8
20	Capital	2	0.6

Meningococcal Disease (Invasive) Rates by Age Group and Sex, 2000

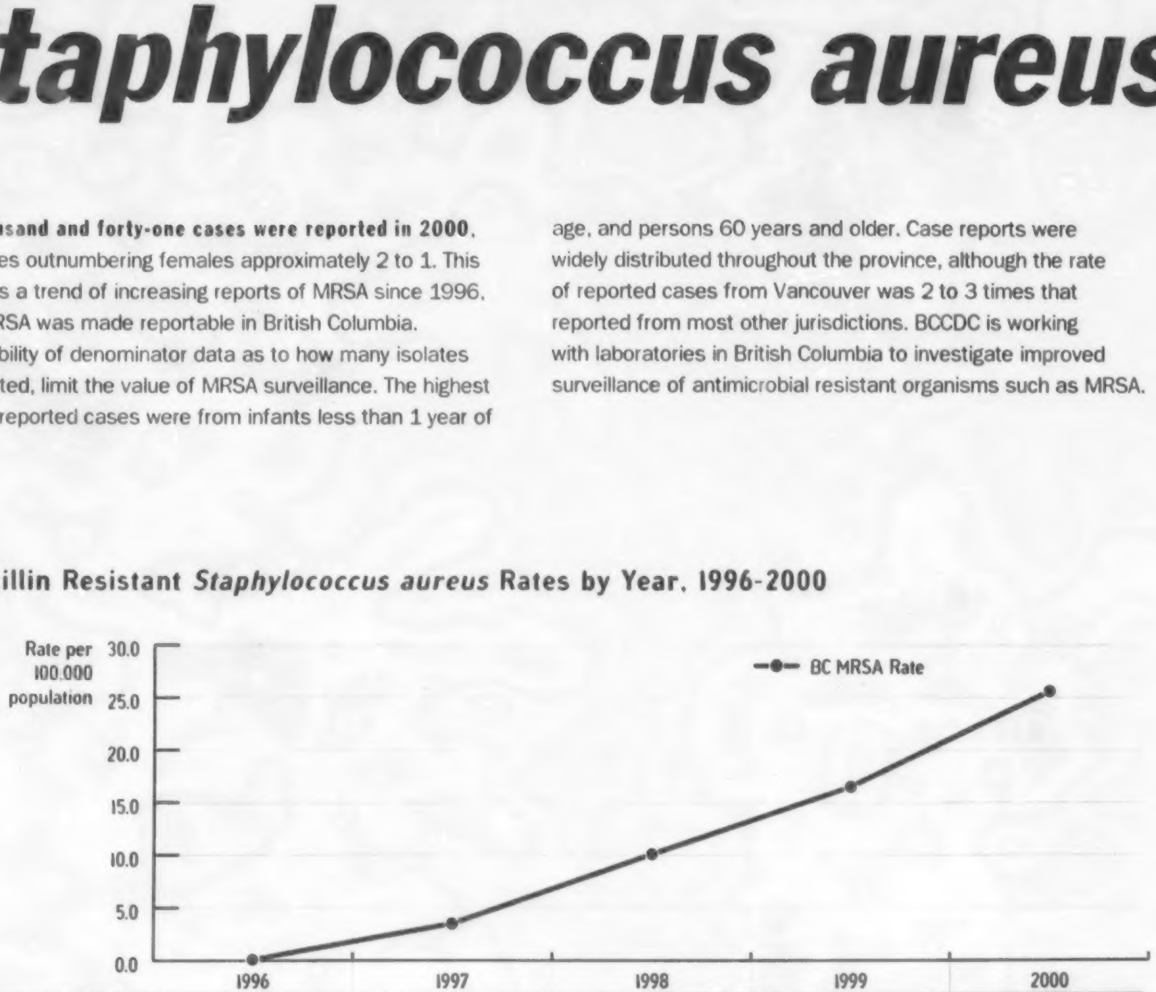


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Meningococcal Cases – Fema	0	1	0	1	5	2	3	0	3	2	[illegible]
Meningococcal Cases – Male	2	1	0	0	2	1	0	0	0	1	7
Meningococcal Rate – Femal	0.0	1.1	0.0	0.8	3.8	1.5	2.2	0.0	0.5	0.5	[illegible]
Meningococcal Rate – Male	9.4	1.1	0.0	0.0	1.4	0.7	0.0	0.0	0.0	0.3	0.3

Methicillin Resistant *Staphylococcus aureus*

One thousand and forty-one cases were reported in 2000, with males outnumbering females approximately 2 to 1. This continues a trend of increasing reports of MRSA since 1996, when MRSA was made reportable in British Columbia. Unavailability of denominator data as to how many isolates were tested, limit the value of MRSA surveillance. The highest rates of reported cases were from infants less than 1 year of age, and persons 60 years and older. Case reports were widely distributed throughout the province, although the rate of reported cases from Vancouver was 2 to 3 times that reported from most other jurisdictions. BCCDC is working with laboratories in British Columbia to investigate improved surveillance of antimicrobial resistant organisms such as MRSA.

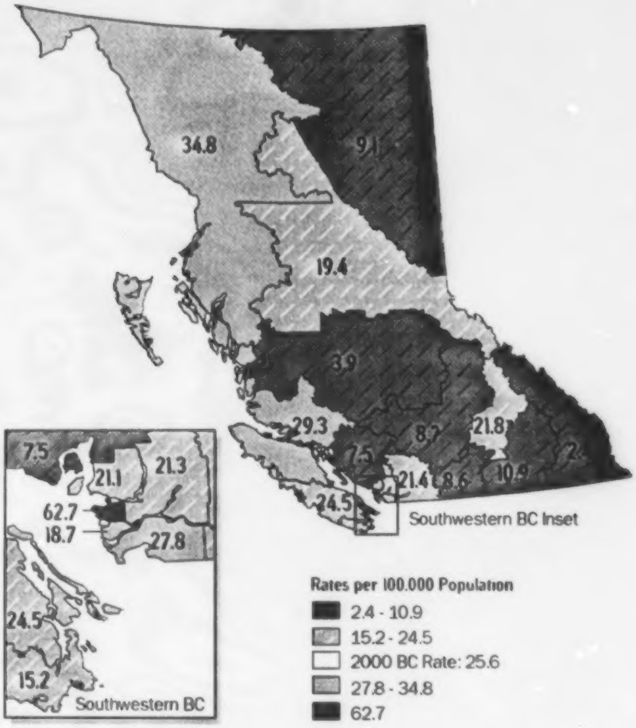
Methicillin Resistant *Staphylococcus aureus* Rates by Year, 1996-2000



	1996	1997	1998	1999	2000
BC MRSA Cases	3	139	404	664	1041
BC MRSA Rate	0.1	3.5	10.1	16.5	25.6

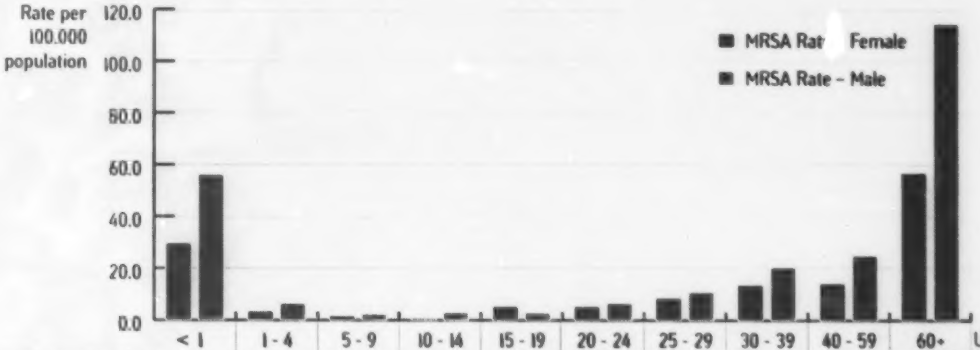
Not Nationally Notifiable

Methicillin Resistant *Staphylococcus aureus* Rates by Health Region, 2000


34.8
9.1
19.4
3.9
29.3
8.7
21.8
7.5
21.4
8.6
10.9
2.4
24.5
Southwestern BC Inset
7.5
21.1
21.3
62.7
18.7
27.8
24.5
15.2
Southwestern BC
Rates per 100,000 Population
2.4 - 10.9
15.2 - 24.5
2000 BC Rate: 25.6
27.8 - 34.8
62.7

HR	Health Region	Cases	Rate
1	East Kootenay	2	2.4
2	West Kootenay - Boundary	9	10.9
3	North Okanagan	26	21.8
4	South Okanagan - Similkameen	20	8.6
5	Thompson	12	8.7
6	Fraser Valley	52	21.4
7	South Fraser Valley	160	27.8
8	Simon Fraser	110	21.3
9	Coast Garibaldi	6	7.5
10	Central Vancouver Island	60	24.5
11	Upper Island/Central Coast	36	29.3
12	Cariboo	3	3.9
13	North West	32	34.8
14	Peace Liard	6	9.1
15	Northern Interior	26	19.4
16	Vancouver	361	62.7
18	North Shore	38	21.1
19	Richmond	31	18.7
20	Capital	51	15.2

Methicillin Resistant *Staphylococcus aureus* Rates by Age Group and Sex, 2000

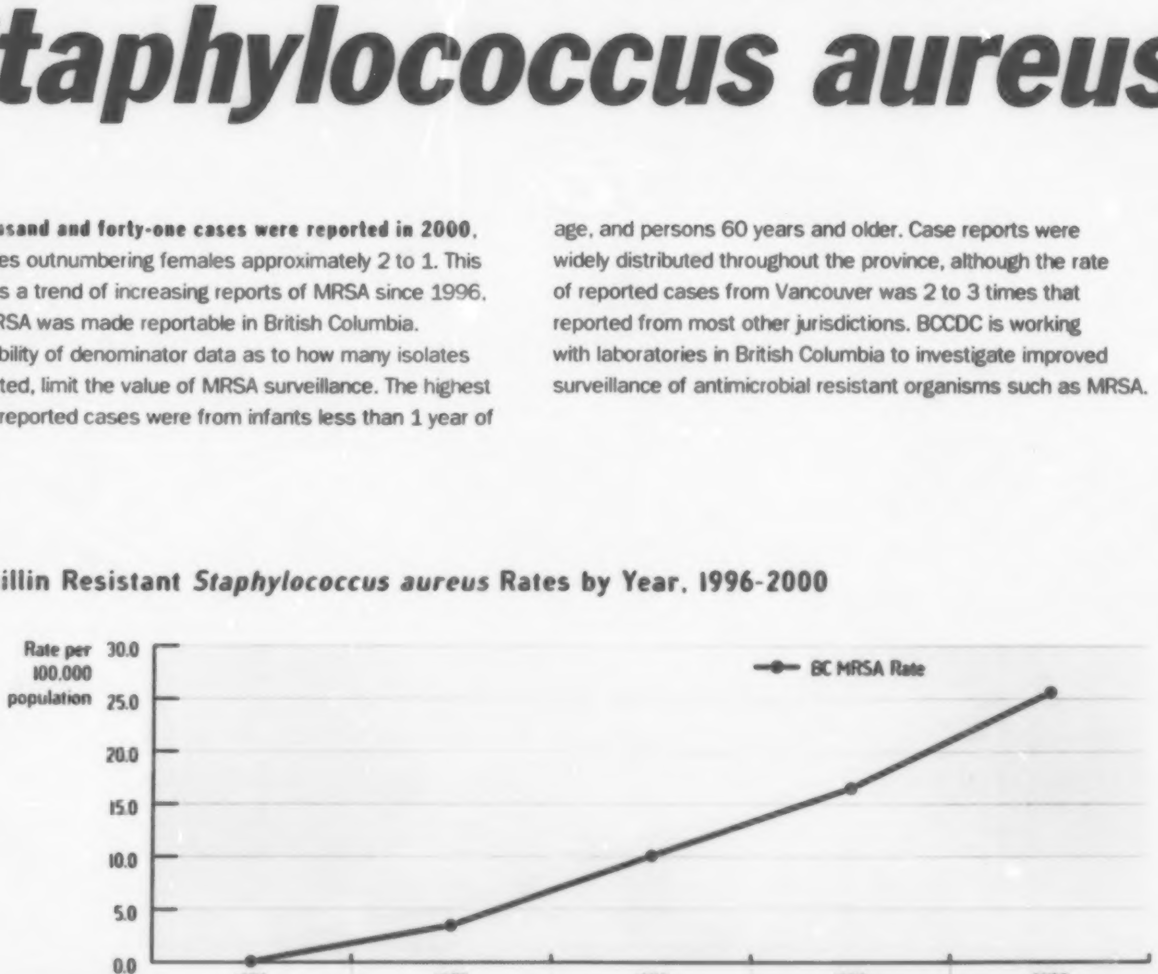


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
MRSA Cases - Female	6	3	2	1	7	7	12	45	83	[illegible]	[illegible]	[illegible]
MRSA Cases - Male	12	6	3	4	4	9	15	68	145	363	7	636
MRSA Cases - Unknown	0	1	0	0	0	0	0	0	0	2	15	18
MRSA Rate - Female	29.6	3.4	1.6	0.8	5.3	5.3	8.7	13.7	14.3	[illegible]		[illegible]
MRSA Rate - Male	56.2	6.4	2.3	3.0	2.9	6.6	10.9	20.5	25.0	114.4		31.5

Methicillin Resistant *Staphylococcus aureus*

One thousand and forty-one cases were reported in 2000, with males outnumbering females approximately 2 to 1. This continues a trend of increasing reports of MRSA since 1996, when MRSA was made reportable in British Columbia. Unavailability of denominator data as to how many isolates were tested, limit the value of MRSA surveillance. The highest rates of reported cases were from infants less than 1 year of age, and persons 60 years and older. Case reports were widely distributed throughout the province, although the rate of reported cases from Vancouver was 2 to 3 times that reported from most other jurisdictions. BCCDC is working with laboratories in British Columbia to investigate improved surveillance of antimicrobial resistant organisms such as MRSA.

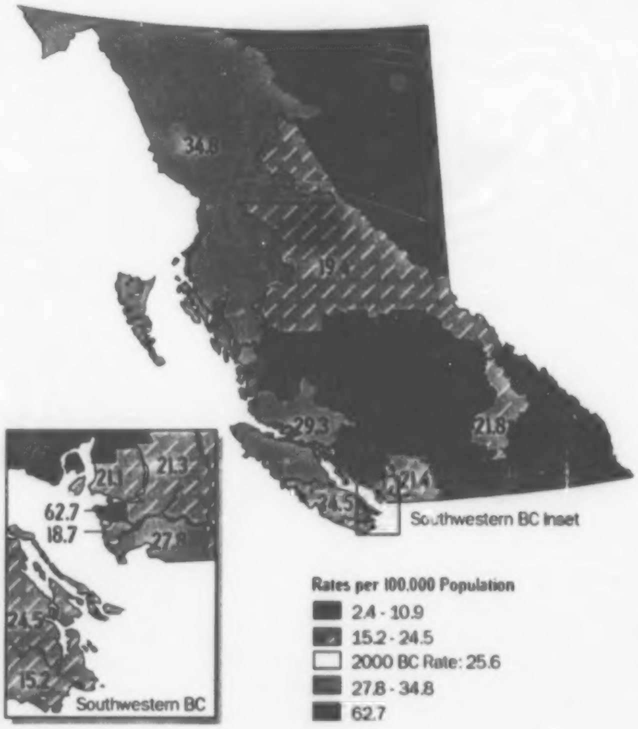
Methicillin Resistant *Staphylococcus aureus* Rates by Year, 1996-2000



	1996	1997	1998	1999	2000
BC MRSA Cases	3	139	40[illegible]	[illegible]	[illegible]
BC MRSA Rate	0.1	3.5	10.1	16.5	25.6

Not Nationally Notifiable

Methicillin Resistant *Staphylococcus aureus* Rates by Health Region, 2000


34.8
19.4
29.3
21.8
21.4
24.5
Southwestern BC Inset
21.1
21.3
62.7
18.7
27.8
24.5
15.2
Southwestern BC
Rates per 100,000 Population
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18	North Shore	38	21.1
19	Richmond	31	18.7
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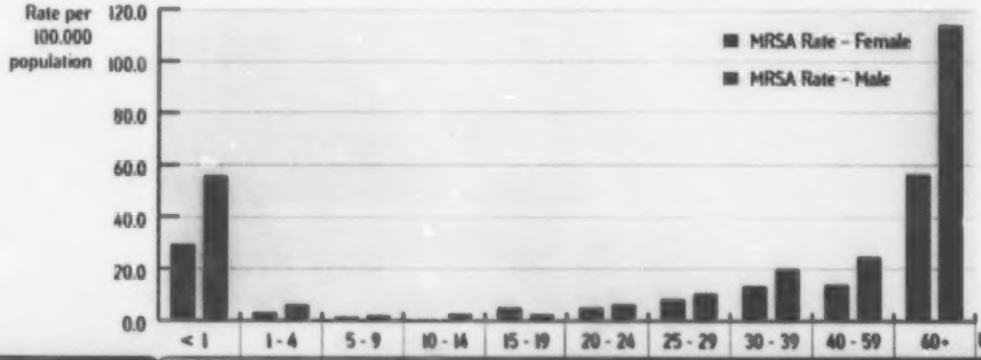
Methicillin Resistant *Staphylococcus aureus* Rates by Age Group and Sex, 2000



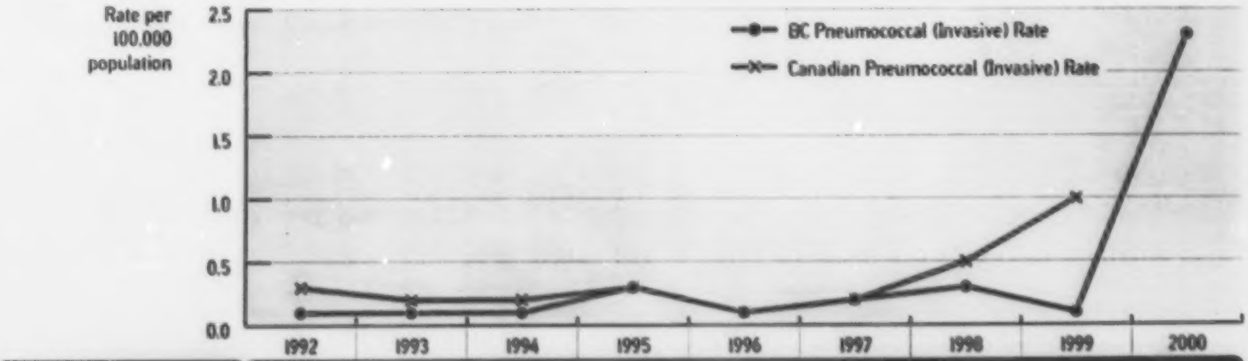
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
MRSA Cases – [illegible]	6	0	2	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MRSA Cases – Male	12	6	3	4	4	9	15	68	145	[illegible]	[illegible]	[illegible]
MRSA Cases – Unknown	0	1	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MRSA Rate – [illegible]	29.6	3.4	1.0	0.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MRSA Rate – Male	56.2	6.4	2.3	3.0	2.9	6.6	10.9	20.5	[illegible]	[illegible]	[illegible]	[illegible]

Pneumococcal Disease (Invasive)

The rate of reporting of invasive pneumococcal disease (IPD) in British Columbia in the year 2000 increased to 2.3 per 100,000 population or a total of 93 cases. However, this apparent increase in rate represents a broadening in case definition, which had previously been limited to pneumococcal meningitis.

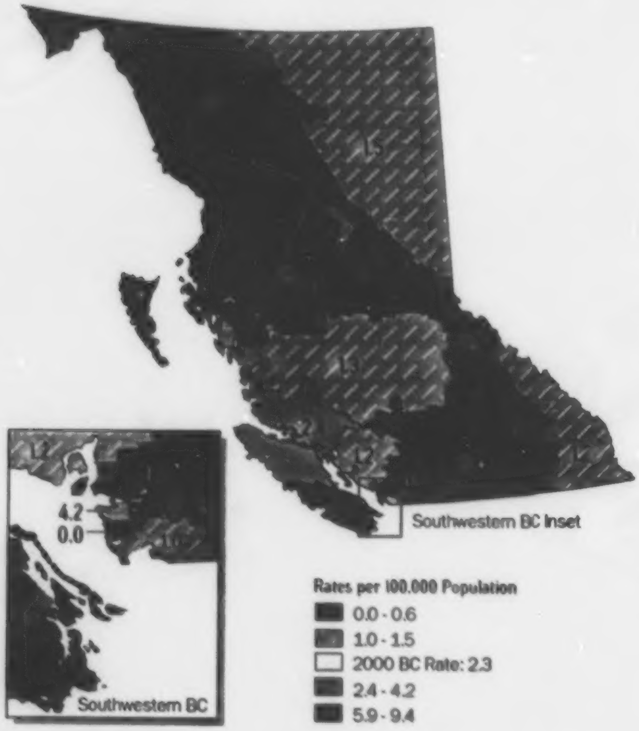
Health Regions reporting rates of IPD above the provincial median included North Okanagan, Thompson, Northern Interior and Vancouver. By far the highest rates of IPD were seen in infants aged less than 1, with very high rates seen in those aged 1-4. Rates for age groups above the age of 5 were considerably lower and this trend persists even in the elderly.

Pneumococcal Disease (Invasive) Rates by Year, 1992-2000



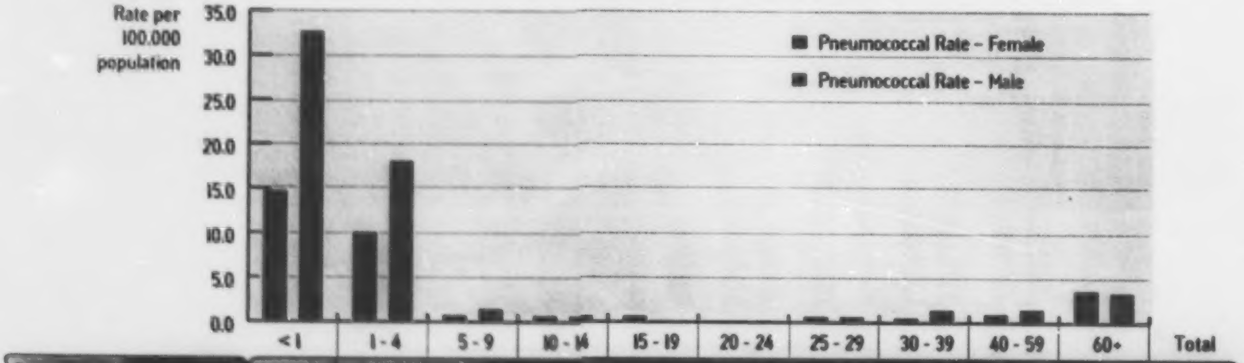
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Pneumococcal [illegible]	4	5	[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Pneumococcal (Invasive) Rate	0.1	0.1	0.1	0.3	0.1	0.2	0.3	0.1	2.3
Can. Pneumococcal [illegible]	0.3	0.2	0.2	0.3	0.1	[illegible]	[illegible]	[illegible]	[illegible]

Pneumococcal Disease (Invasive) Rates by Health Region, 2000


15
11
14
12
4.2
0.0
16
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0 - 0.6
1.0 - 1.5
2000 BC Rate: 2.3
2.4 - 4.2
5.9 - 9.4

HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	7	5.9
4	South Okanagan - Similkameen	0	0.0
5	Thompson	13	9.4
6	Fraser Valley	1	0.4
7	South Fraser Valley	6	1.0
8	Simon Fraser	1	0.2
9	Coast Garibaldi	1	1.2
10	Central Vancouver Island	1	0.4
11	Upper Island/Central Coast	3	2.4
12	Cariboo	1	1.3
13	North West	0	0.0
14	Peace Liard	1	1.5
15	Northern Interior	12	8.9
16	Vancouver	24	4.2
18	North Shore	1	0.6
19	Richmond	0	0.0
20	Capital	20	6.0

Pneumococcal Disease (Invasive) Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Pneumococcal [illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pneumococcal Cases - [illegible]	7	17	2	1	0	0	1	[illegible]	[illegible]	[illegible]	[illegible]
Pneumococcal Cases [illegible]	8	8	8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pneumococcal Ra[illegible]	14.8	10.2	0.[illegible]	[illegible]	0.[illegible]	0.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Pneumococcal Rate - [illegible]	32.8	18.2	1.6	0.7	0.0	0.0	0.2	[illegible]	[illegible]	[illegible]	[illegible]

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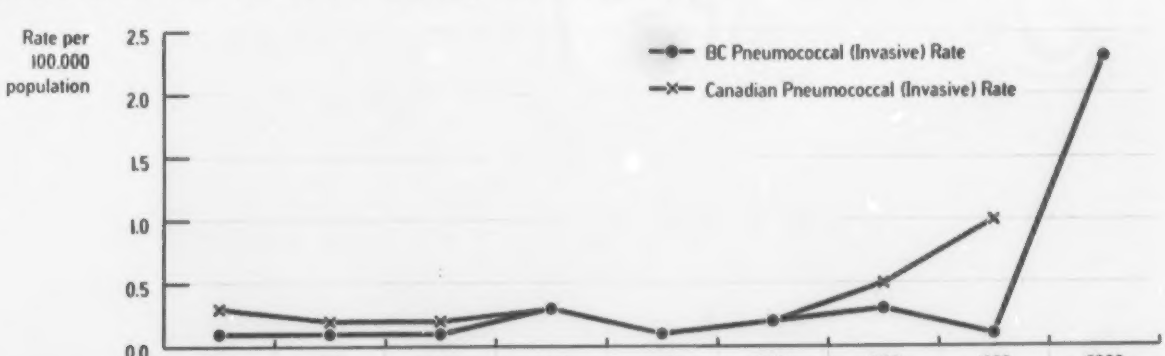
The rate of reporting of invasive pneumococcal disease (IPD) in British Columbia in the year 2000 increased to 2.3 per 100,000 population or a total of 93 cases. However, this apparent increase in rate represents a broadening in case definition, which had previously been limited to pneumococcal meningitis.

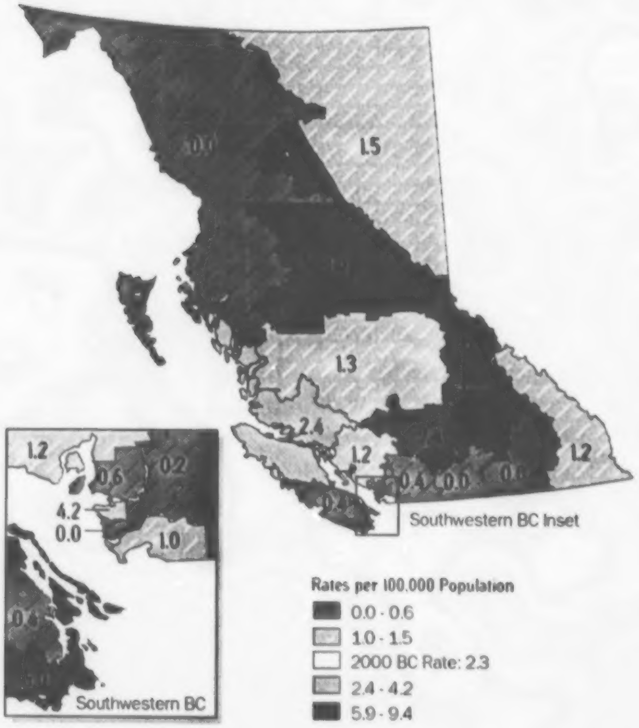
Health Regions reporting rates of IPD above the provincial median included North Okanagan, Thompson, Northern Interior and Vancouver. By far the highest rates of IPD were seen in infants aged less than 1, with very high rates seen in those aged 1-4. Rates for age groups above the age of 5 were considerably lower and this trend persists even in the elderly.

Pneumococcal Disease (Invasive) Rates by Year, 1992-2000



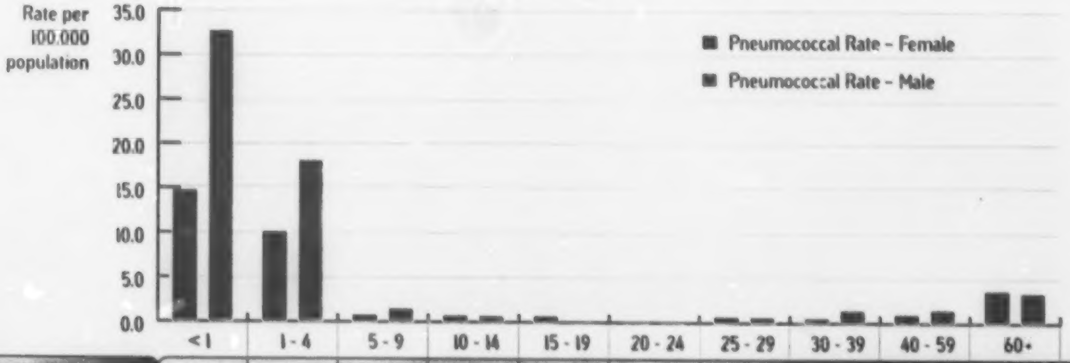
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Pneumococcal (Invasive) Cas	4	5	4	13	4	6	12	5	93
BC Pneumococcal (Invasive) Rate	0.1	0.1	0.1	0.3	0.1	0.2	0.3	0.1	2.3
Can. Pneumococcal (Invasive) Ra	0.3	0.2	0.2	0.3	0.1	0.2	0.5	1.0	

Pneumococcal Disease (Invasive) Rates by Health Region, 2000


0.0
1.5
1.3
2.4
1.2
0.4
0.0
0.0
1.2
0.4
Southwestern BC Inset
1.2
0.6
0.2
4.2
0.0
1.0
0.4
6.0
Southwestern BC
Rates per 100,000 Population
0.0 - 0.6
1.0 - 1.5
2000 BC Rate: 2.3
2.4 - 4.2
5.9 - 9.4

HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	7	5.9
4	South Okanagan - Similkameen	0	0.0
5	Thompson	13	9.4
6	Fraser Valley	1	0.4
7	South Fraser Valley	6	1.0
8	Simon Fraser	1	0.2
9	Coast Garibaldi	1	1.2
10	Central Vancouver Island	1	0.4
11	Upper Island/Central Coast	3	2.4
12	Cariboo	1	1.3
13	North West	0	0.0
14	Peace Liard	1	1.5
15	Northern Interior	12	8.9
16	Vancouver	24	4.2
18	North Shore	1	0.6
19	Richmond	0	0.0
20	Capital	20	6.0

Pneumococcal Disease (Invasive) Rates by Age Group and Sex, 2000



	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Pneumococcal Cases - Fema	3	9	1	1	1	0	1	[illegible]	[illegible]	[illegible]	[illegible]
Pneumococcal Cases - Male	7	17	2	1	0	0	1	5	9	11	53
Pneumococcal Cases - Unknow	0	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]
Pneumococcal Rate - Femal	14.6	10.2	0.8	0.8	0.8	0.0	0.7	[illegible]	[illegible]	[illegible]	[illegible]
Pneumococcal Rate - Male	32.8	18.2	1.6	0.7	0.0	0.0	0.7	1.5	1.6	3.5	2.6

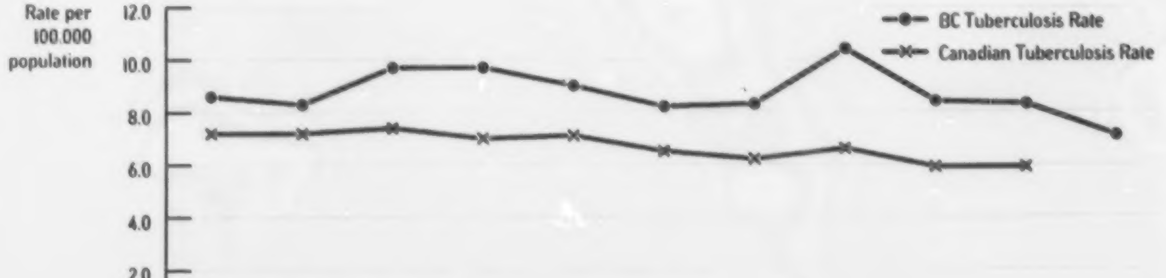
Tuberculosis

In 2000 there were 290 cases of active tuberculosis reported in British Columbia, a 13% reduction in the number of cases reported compared to (332) cases in 1999. The provincial rate is also less than that of the previous year (7.1 per 100,000 vs 8.3 per 100,000 in 1999), although remains higher than the national rate of 5.9 per 100,000 reported in 1999.

Rates for the various Health Regions vary across the province. The Simon Fraser, South Fraser Valley and Vancouver/Richmond Health boards continue to have rates exceeding the provincial rate. The majority of cases numerically are reported from these Health Regions (221 cases or 76%).

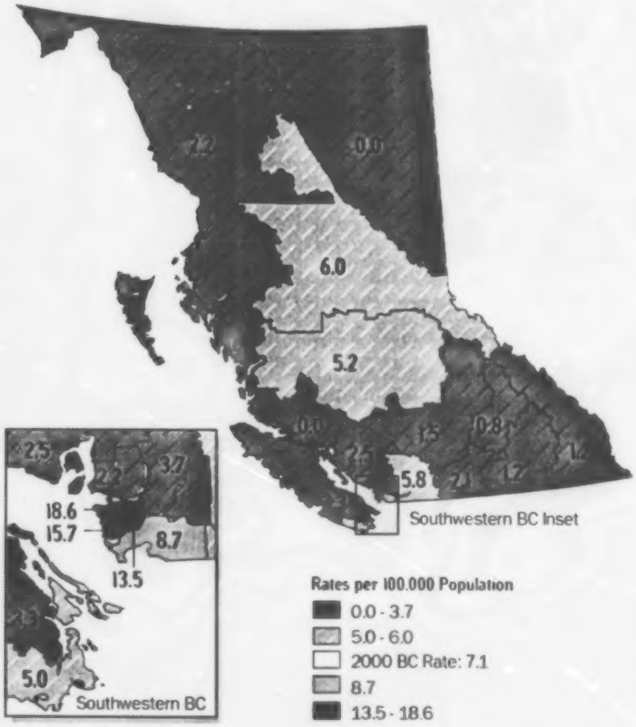
Males continue to predominate (163 versus 127 females). The age specific rates show a peak from age 25-29, rising again after age 40 and are higher in males.

Tuberculosis Rates by Year, 1990-2000



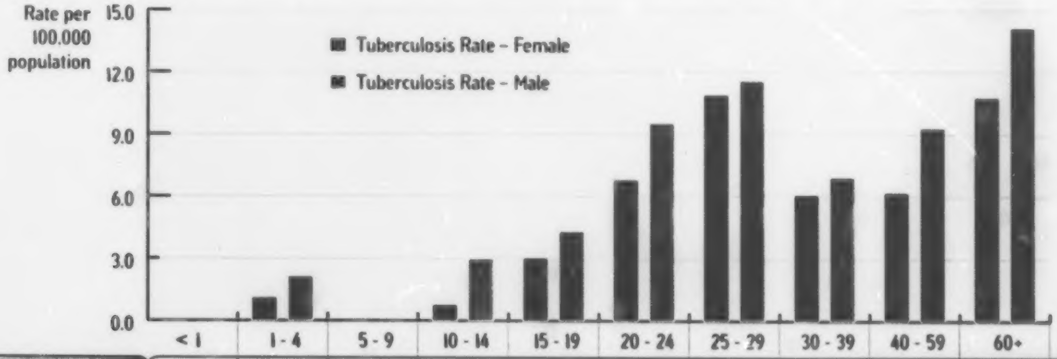
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Tuberculosis Cases	282	280	335	346	332	312	323	413	337	332	290
BC Tuberculosis Rate	8.6	8.3	9.7	9.7	9.0	8.2	8.3	10.4	8.4	8.3	7.1
Canadian Tuberculosis Rate	7.2	7.2	7.4	7.0	7.1	6.6	6.3	6.6	5.9	5.9	

Tuberculosis Rates by Health Region, 2000


2.2
0.0
6.0
5.2
0.0
1.5
0.8
1.2
2.5
5.8
2.1
1.2
Southwestern BC Inset
2.5
3.7
2.2
18.6
15.7
8.7
13.5
3.3
5.0
Southwestern BC
Rates per 100,000 Population
0.0 - 3.7
5.0 - 6.0
2000 BC Rate: 7.1
8.7
13.5 - 18.6

HR	Health Region	Reports	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	5	2.1
5	Thompson	2	1.5
6	Fraser Valley	14	5.8
7	South Fraser Valley	50	8.7
8	Simon Fraser	12	3.7
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	8	3.3
11	Upper Island/Central Coast	0	0.0
12	Cariboo	4	5.2
13	North West	2	2.2
14	Peace Liard	0	0.0
15	Northern Interior	8	6.0
16	Vancouver	107	18.6
17	Burnaby	26	13.5
18	North Shore	4	2.2
19	Richmond	26	15.7
20	Capital	17	5.1

Tuberculosis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Tuberculosis Cases – Femal	0	1	0	1	4	9	15	20	[illegible]	[illegible]	[illegible]
Tuberculosis Cases – Male	0	2	0	4	6	13	16	23	54	45	163
Tuberculosis Rate – Femal	0	1.1	0	0.8	3.0	6.8	10.9	6.1	[illegible]	[illegible]	[illegible]
Tuberculosis Rate – Male	0	2.1	0	3.0	4.3	9.6	11.6	6.9	9.3	14.2	8.1

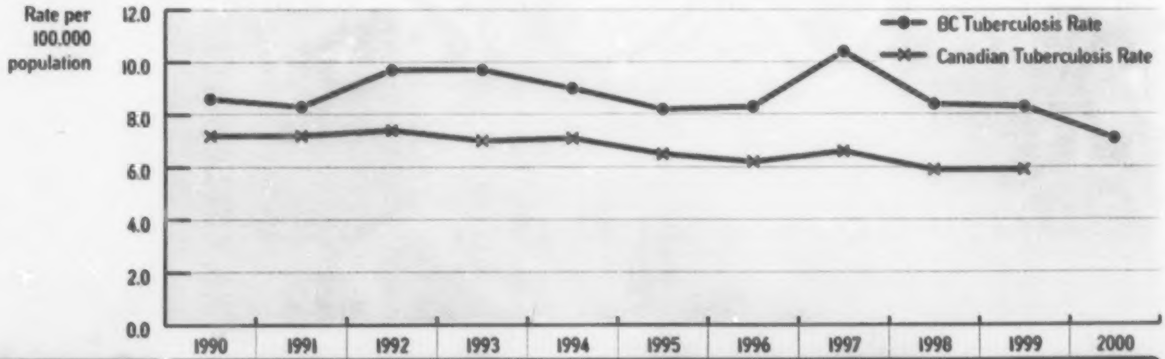
Tuberculosis

In 2000 there were 290 cases of active tuberculosis reported in British Columbia, a 13% reduction in the number of cases reported compared to (332) cases in 1999. The provincial rate is also less than that of the previous year (7.1 per 100,000 vs 8.3 per 100,000 in 1999), although remains higher than the national rate of 5.9 per 100,000 reported in 1999.

Rates for the various Health Regions vary across the province. The Simon Fraser, South Fraser Valley and Vancouver/Richmond Health boards continue to have rates exceeding the provincial rate. The majority of cases numerically are reported from these Health Regions (221 cases or 76%).

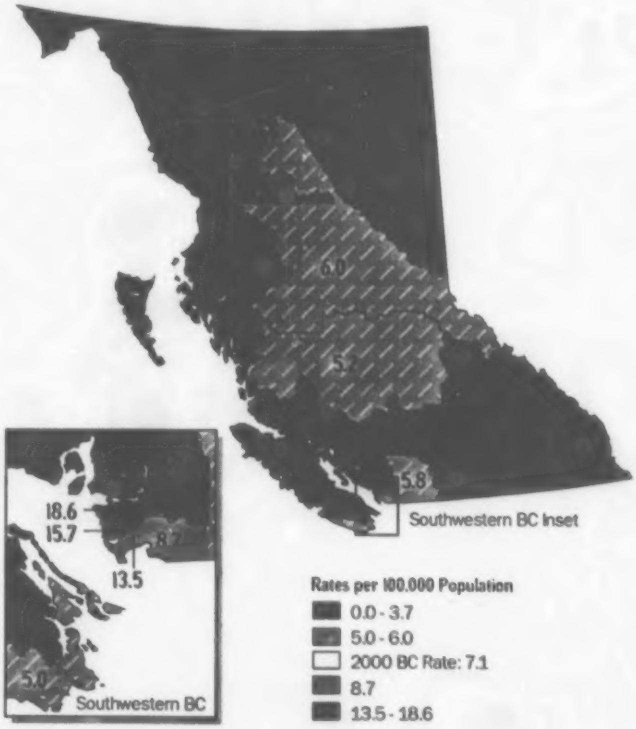
Males continue to predominate (163 versus 127 females). The age specific rates show a peak from age 25-29, rising again after age 40 and are higher in males.

Tuberculosis Rates by Year, 1990-2000



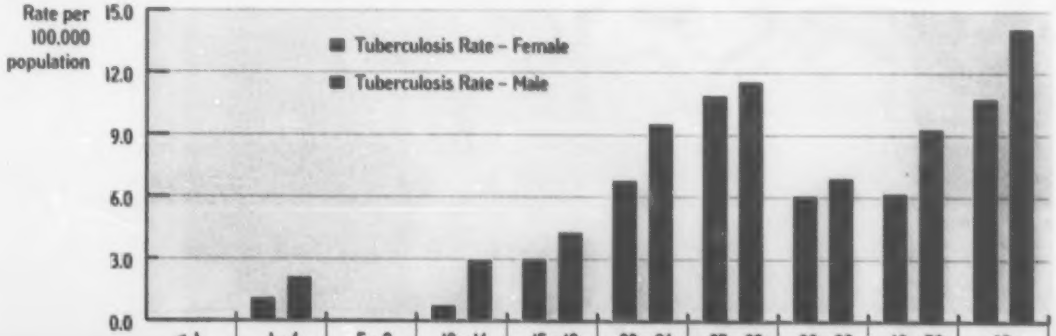
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Tuberculosis [illegible]	282	280	335	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Tuberculosis Rate	8.6	8.3	9.7	9.7	9.0	8.2	8.3	10.4	8.4	8.3	7.1
Canadian [illegible]	7.2	7.2	7.4	7.0	7.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Tuberculosis Rates by Health Region, 2000


6.0
5.2
5.8
Southwestern BC Inset
18.6
15.7
8.7
13.5
5.0
Southwestern BC
Rates per 100,000 Population
0.0 - 3.7
5.0 - 6.0
2000 BC Rate: 7.1
8.7
13.5 - 18.6

HR	Health Region	Reports	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	5	2.1
5	Thompson	2	1.5
6	Fraser Valley	14	5.8
7	South Fraser Valley	50	8.7
8	Simon Fraser	12	3.7
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	8	3.3
11	Upper Island/Central Coast	0	0.0
12	Cariboo	4	5.2
13	North West	2	2.2
14	Peace Liard	0	0.0
15	Northern Interior	8	6.0
16	Vancouver	107	18.6
17	Burnaby	26	13.5
18	North Shore	4	2.2
19	Richmond	26	15.7
20	Capital	17	5.1

Tuberculosis Rates by Age Group and Sex, 2000

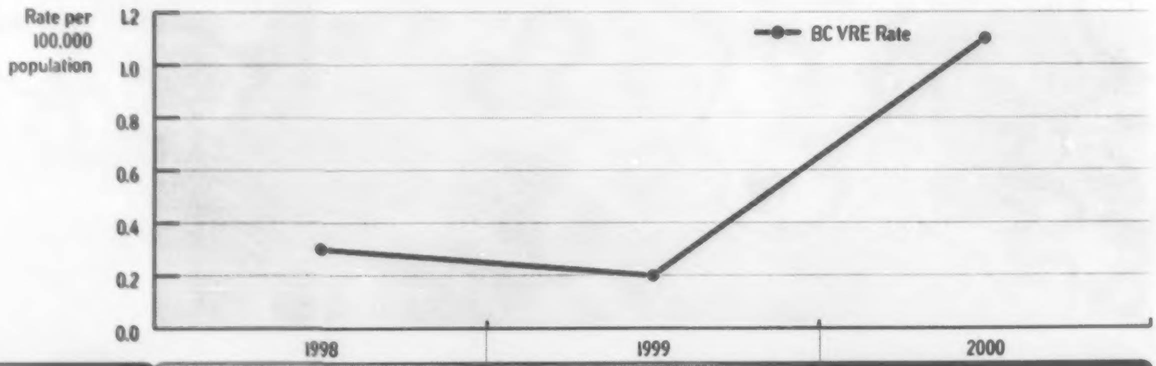


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Tuberculosis [illegible]	0	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tuberculosis Cases – Male	0	2	0	4	6	13	16	23	[illegible]	[illegible]	163
Tuberculosis [illegible]	0	1.1	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tuberculosis Rates – Male	0	2.1	0	3.0	4.3	9.6	11.6	6.9	[illegible]	[illegible]	[illegible]

Vancomycin Resistant Enterococci

VRE has been reportable in British Columbia since 1996, case reporting began in 1998. Forty-six cases (21 female and 25 male) were reported in 2000, a five-fold increase from each of the previous two years. Unavailability of denominator data as to how many isolates were tested, limit the value of VRE surveillance. There were no reported cases in persons under 30 years of age, and the highest rates of reported VRE were among persons 60 years and older. An urban-rural gradient was apparent, with over three-quarters of reports originating from the Lower Mainland. BCCDC is working with laboratories in British Columbia to investigate improved surveillance of antimicrobial resistant organisms such as VRE.

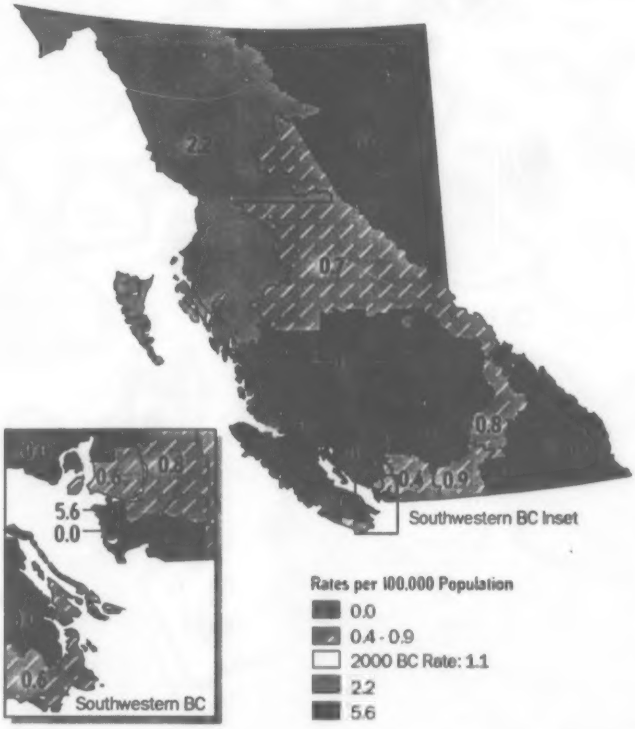
Vancomycin Resistant Enterococci Rates by Year, 1998-2000



	1998	1999	2000
BC VRE Case	13	9	[illegible]
BC VRE Rate	0.3	0.2	1.1

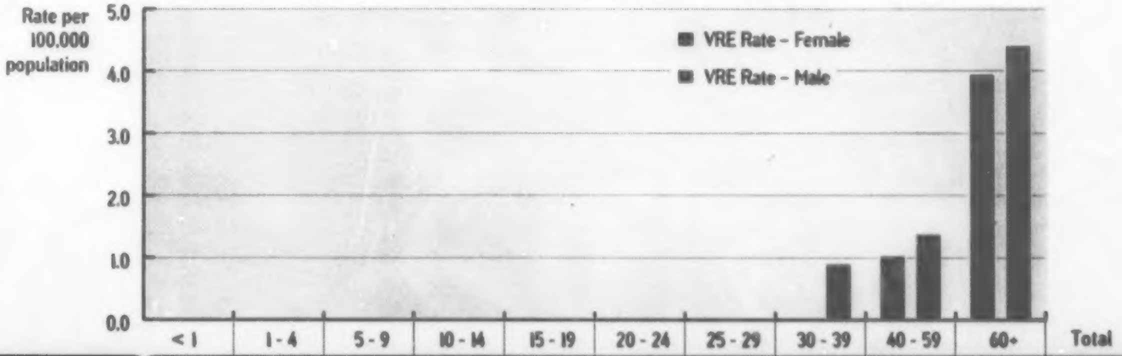
Not Nationally Notifiable

Vancomycin Resistant Enterococci Rates by Health Region, 2000


2.2
0.7
0.8
0.4
0.9
0.6
0.8
5.6
0.0
0.6
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0
0.4 - 0.9
2000 BC Rate: 1.1
2.2
5.6

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	2	0.9
5	Thompson	0	0.0
6	Fraser Valley	1	0.4
7	South Fraser Valley	0	0.0
8	Simon Fraser	4	0.8
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	0	0.0
13	North West	2	2.2
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	32	5.6
18	North Shore	1	0.6
19	Richmond	0	0.0
20	Capital	2	0.6

Vancomycin Resistant Enterococci Rates by Age Group and Sex, 2000

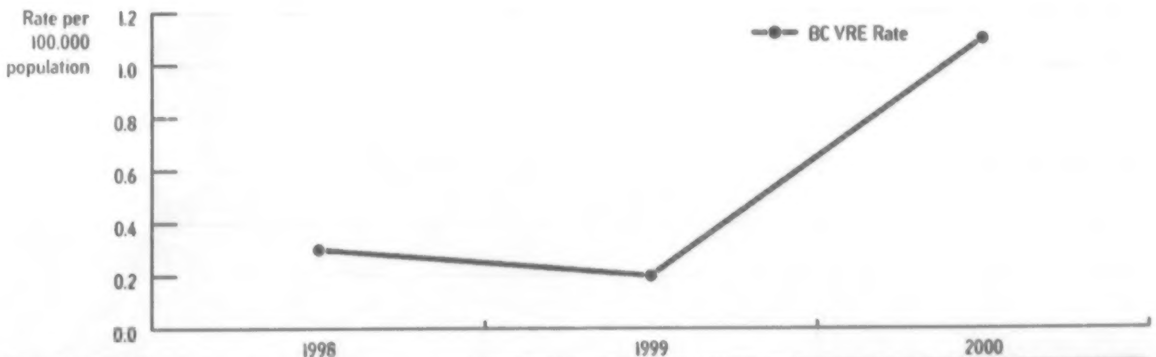


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
VRE Cases – Female	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VRE Cases – Male	0	0	0	0	0	0	0	3	8	[illegible]	[illegible]
VRE Rate – Female	0.0	0.0	0.0	[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VRE Rate – Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]

Vancomycin Resistant Enterococci

VRE has been reportable in British Columbia since 1996, case reporting began in 1998. Forty-six cases (21 female and 25 male) were reported in 2000, a five-fold increase from each of the previous two years. Unavailability of denominator data as to how many isolates were tested, limit the value of VRE surveillance. There were no reported cases in persons under 30 years of age, and the highest rates of reported VRE were among persons 60 years and older. An urban-rural gradient was apparent, with over three-quarters of reports originating from the Lower Mainland. BCCDC is working with laboratories in British Columbia to investigate improved surveillance of antimicrobial resistant organisms such as VRE.

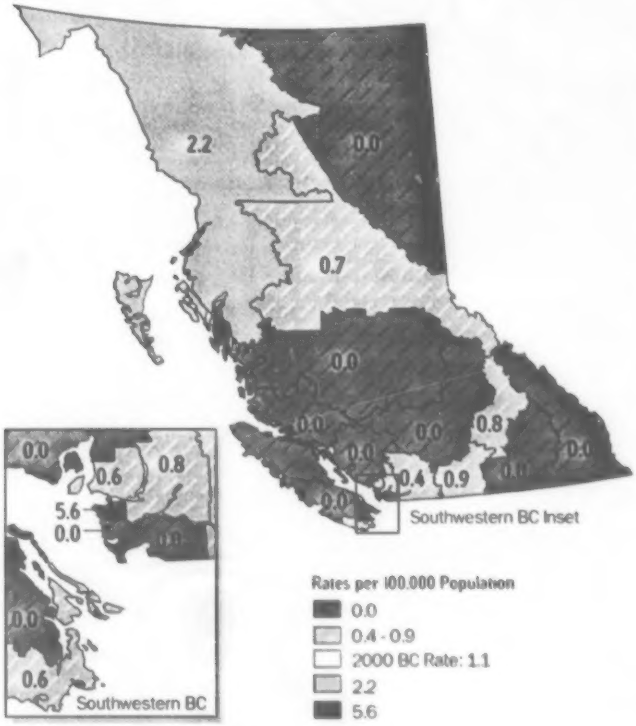
Vancomycin Resistant Enterococci Rates by Year, 1998-2000



	1998	1999	2000
BC VRE Cases	13	9	46
BC VRE Rate	0.3	0.2	1.1

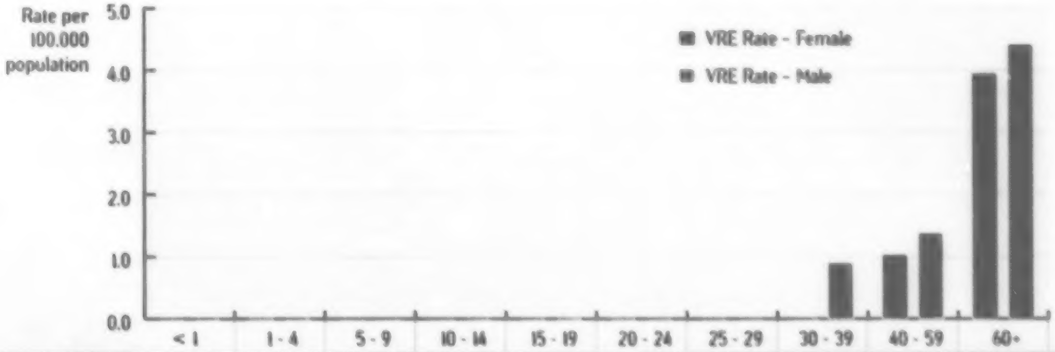
Not Nationally Notifiable

Vancomycin Resistant Enterococci Rates by Health Region, 2000


2.2
0.0
0.7
0.0
0.0
0.0
0.8
0.0
0.0
0.0
0.4
0.9
0.0
0.0
0.6
0.8
5.6
0.0
0.0
0.0
0.6
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
0.4 - 0.9
2000 BC Rate: 1.1
2.2
5.6

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	2	0.9
5	Thompson	0	0.0
6	Fraser Valley	1	0.4
7	South Fraser Valley	0	0.0
8	Simon Fraser	4	0.8
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	0	0.0
13	North West	2	2.2
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	32	5.6
18	North Shore	1	0.6
19	Richmond	0	0.0
20	Capital	2	0.6

Vancomycin Resistant Enterococci Rates by Age Group and Sex, 2000



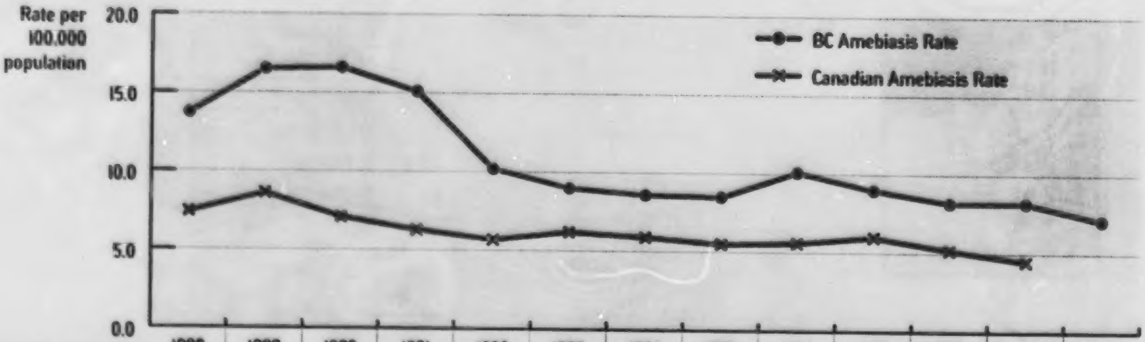
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
VRE Cases – Female	0	0	0	0	0	0	0	0	6	[illegible]	[illegible]
VRE Cases – Male	0	0	0	0	0	0	0	3	8	14	25
VRE Rate – Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	[illegible]	[illegible]
VRE Rate – Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.4	4.4	1.2

Enteric, Food and Waterborne Diseases

Amebiasis

Reporting of amebiasis showed a slight decline in 2000. A seasonal pattern is not obvious. Reporting was highest among males between 25 to 59 years of age. Vancouver had the highest rate at 26.7 cases per 100,000.

Amebiasis Rates by Year, 1988-2000



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Amebiasis Ca[illegible]	427	527	547	509	353	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Amebiasis Rate	13.7	16.5	16.6	15.1	10.2	9.0	8.6	8.5	10.1	9.0	8.2	8.2	[illegible]
Canadian Amebi[illegible]	7.4	8.6	7.1	6.3	5.7	6.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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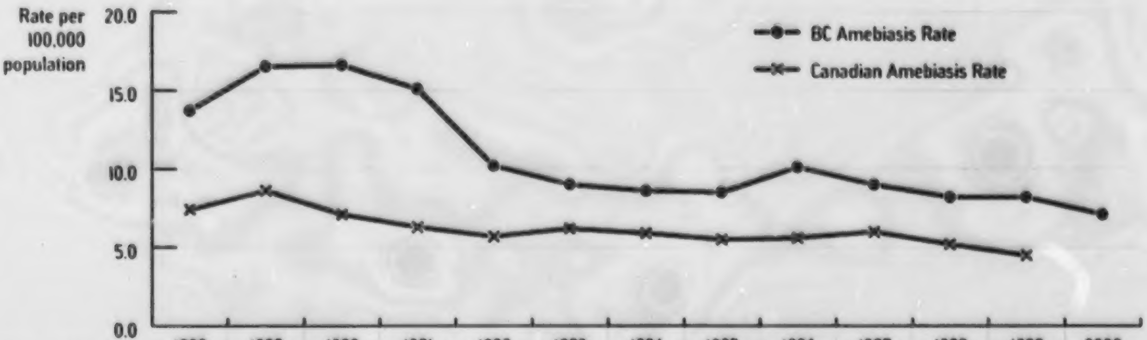
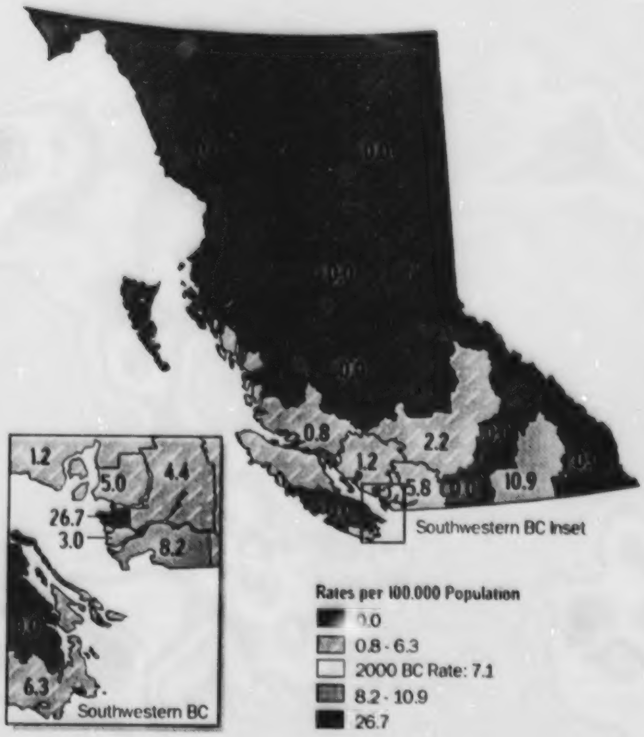
Amebiasis Rates by Year, 1988-2000



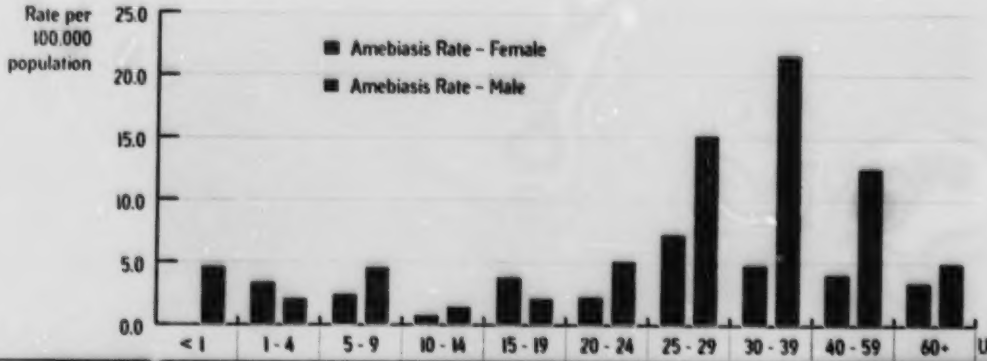
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Amebiasis Cases	427	527	547	509	353	323	318	321	392	358	327	[illegible]	[illegible]
BC Amebiasis Rate	13.7	16.5	16.6	15.1	10.2	9.0	8.6	8.5	10.1	9.0	8.2	8.2	7.1
Canadian Amebiasis Rate	7.4	8.6	7.1	6.3	5.7	6.2	5.9	5.5	5.6	6.0	5.2	4.5	

Amebiasis Rates by Health Region, 2000


0.0
0.0
0.0
0.0
0.8
2.2
1.2
5.8
0.0
10.9
0.0
Southwestern BC Inset
1.2
5.0
4.4
26.7
3.0
8.2
0.0
6.3
Southwestern BC
Rates per 100,000 Population
0.0
0.8 - 6.3
2000 BC Rate: 7.1
8.2 - 10.9
26.7

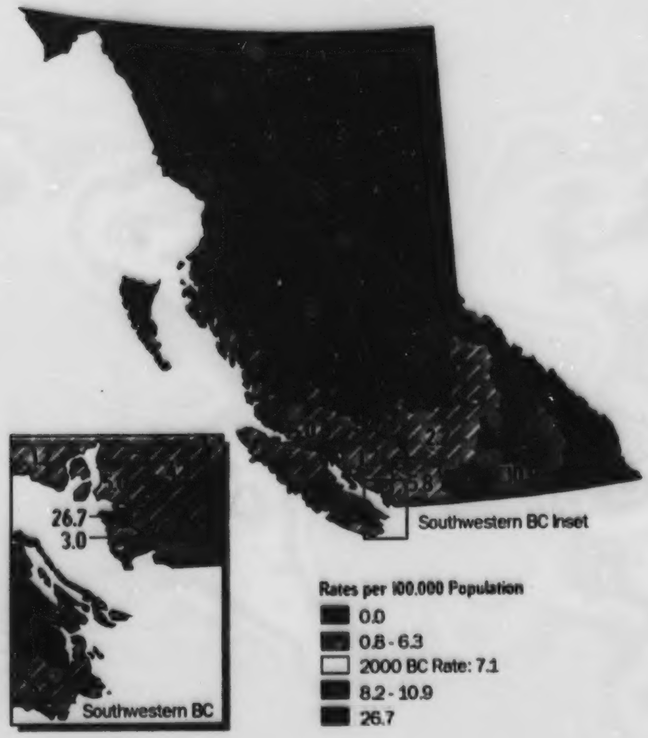
HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	9	10.9
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	3	2.2
6	Fraser Valley	14	5.8
7	South Fraser Valley	47	8.2
8	Simon Fraser	23	4.4
9	Coast Garibaldi	1	1.2
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	1	0.8
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	154	26.7
18	North Shore	9	5.0
19	Richmond	5	3.0
20	Capital	21	6.3

Amebiasis Rates by Age Group and Sex, 2000



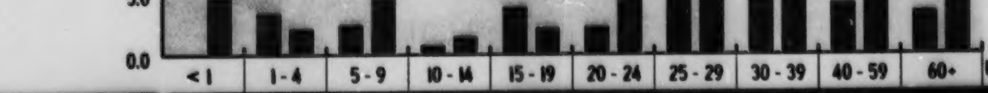
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Amebiasis Cases - Fem[illegible]	0	3	3	1	5	3	10	16	[illegible]	[illegible]	[illegible]	[illegible]
Amebiasis Cases - Male	1	2	6	2	3	7	21	72	73	16	2	205
Amebiasis Cases - Unknow[illegible]	0	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]
Amebiasis Rate - Fem[illegible]	0.0	3.4	2.5	0.8	3.8	2.3	7.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Amebiasis Rate - Male	4.7	2.1	4.7	1.5	2.2	5.1	15.2	21.7	12.6	5.0		10.2

Amebiasis Rates by Health Region, 2000


26.7
3.0
5.8
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0
0.8 - 6.3
2000 BC Rate: 7.1
8.2 - 10.9
26.7

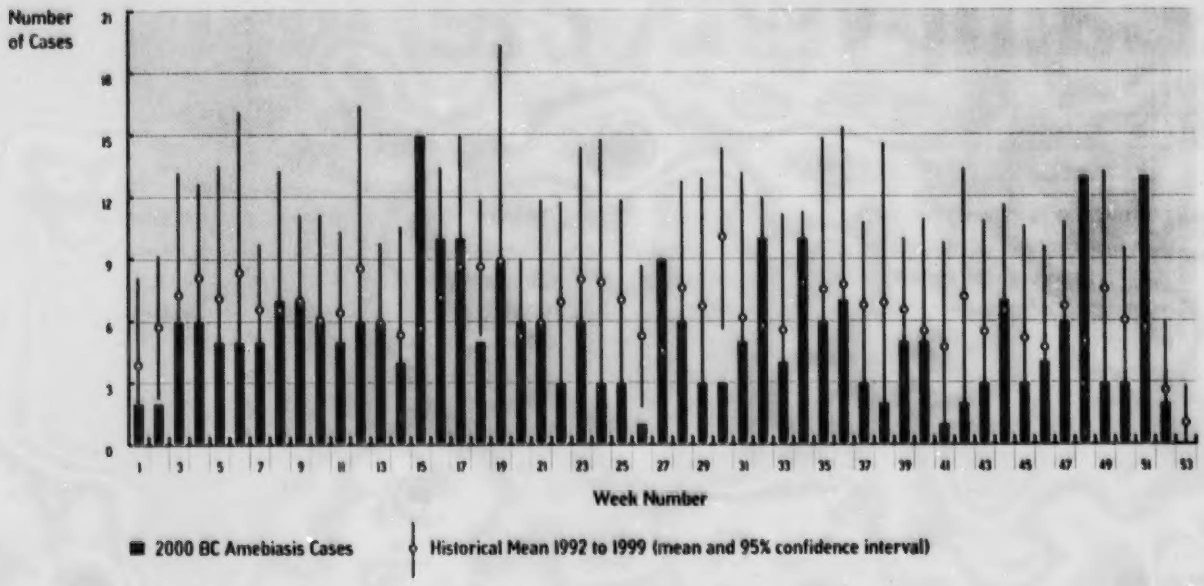
HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	9	10.9
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	3	2.2
6	Fraser Valley	14	5.8
7	South Fraser Valley	47	8.2
8	Simon Fraser	23	4.4
9	Coast Garibaldi	1	1.2
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	1	0.8
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	154	26.7
18	North Shore	9	5.0
19	Richmond	5	3.0
20	Capital	21	6.3

Amebiasis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Amebiasis Cas[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Amebiasis Cases - Ma[illegible]	1	2	6	2	3	7	21	72	[illegible]	[illegible]	[illegible]	[illegible]
Amebiasis Cas[illegible]	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Amebiasis [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Amebiasis [illegible]	4.7	2.1	4.7	1.5	[illegible]	5.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

2000 BC Amebiasis Cases by Week Compared to Historical Numbers from 1992 to 1999



Botulism

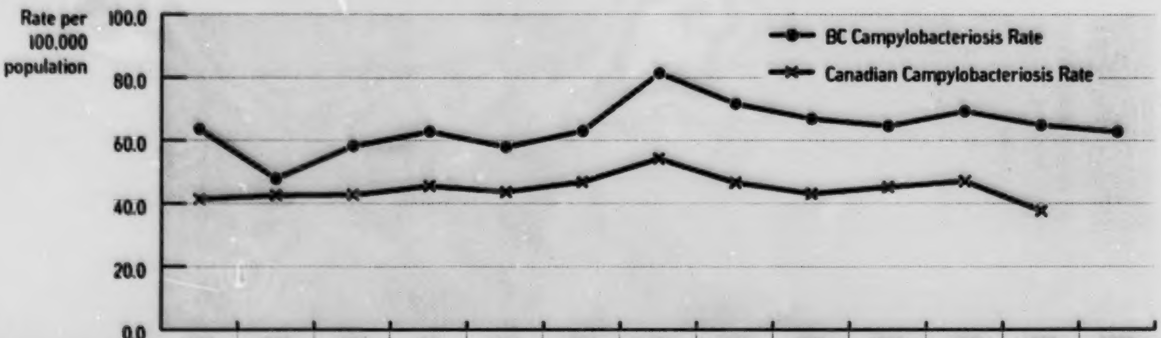
One case of botulism, in the North West Health Region, was reported in 2000.

Campylobacteriosis

Reporting has remained steady over the past 6 years. In 2000, there were 2,553 reports for a rate of 62.8 cases per 100,000. Reporting was highest during the summer (weeks 25 through 37).

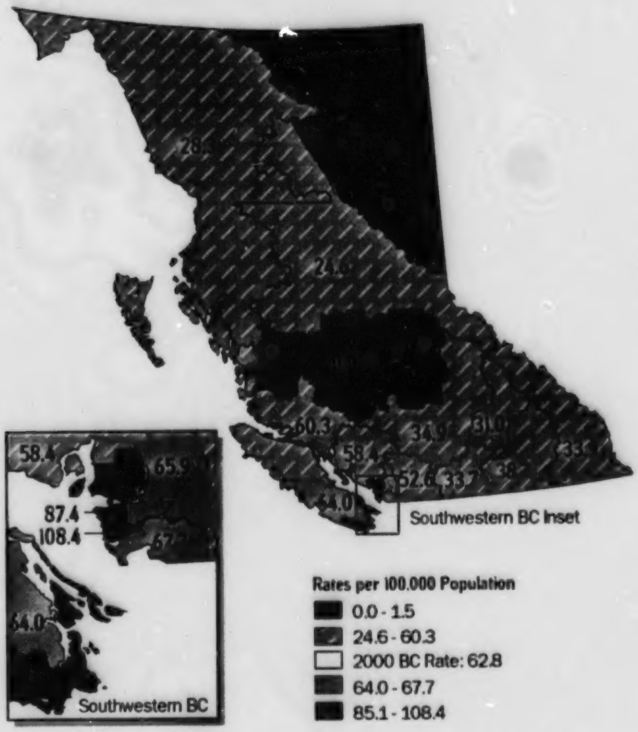
The age distribution of cases followed an expected bimodal distribution, with peak reporting rates in the less than 5 year age group, and the 20 to 24 year age group. The highest reporting rates were generally seen in the Lower Mainland and on Vancouver Island.

Campylobacteriosis Rates by Year, 1988-2000



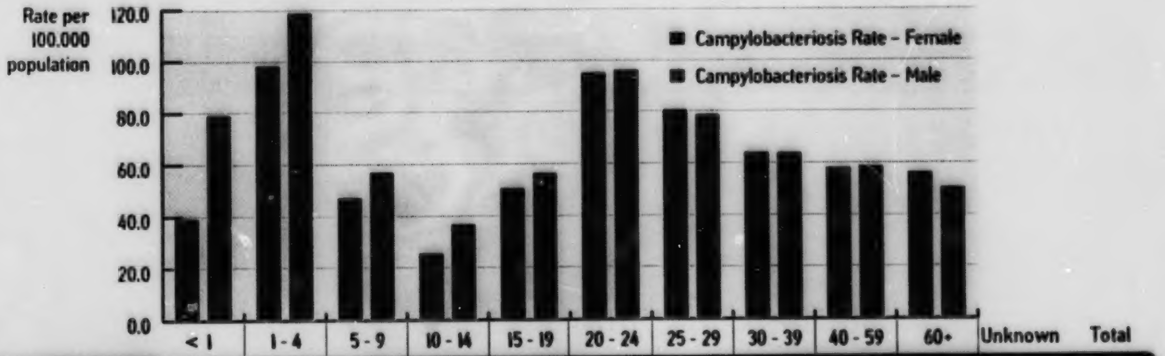
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Campylobac[illegible]	1982	1528	1917	2117	201[illegible]	2251	2997	27[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Campylobacteriosis Rate	63.6	47.8	58.2	62.8	57.9	63.0	81.4	71.6	66.9	64.6	69.3	64.9	62.8
Can. Campylobac[illegible]	41.4	42.5	42.7	45.5	43.7	46.8	54.2	46.[illegible]	4[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Campylobacteriosis Rates by Health Region, 2000


28.3
24.6
60.3
58.4
34.9
31.0
33.9
52.6
33.7
38
64.0
Southwestern BC Inset
58.4
65.9
87.4
108.4
67
64.0
Southwestern BC
Rates per 100,000 Population
■ 0.0 - 1.5
▨ 24.6 - 60.3
☐ 2000 BC Rate: 62.8
■ 64.0 - 67.7
■ 85.1 - 108.4

HR	Health Region	Cases	Rate
1	East Kootenay	28	33.9
2	West Kootenay - Boundary	32	38.7
3	North Okanagan	37	31.0
4	South Okanagan - Similkameen	88	37.7
5	Thompson	48	34.9
6	Fraser Valley	128	52.6
7	South Fraser Valley	390	67.7
8	Simon Fraser	341	65.9
9	Coast Garibaldi	47	58.4
10	Central Vancouver Island	157	64.0
11	Upper Island/Central Coast	74	60.3
12	Cariboo	0	0.0
13	North West	26	28.3
14	Peace Liard	1	1.5
15	Northern Interior	33	24.6
16	Vancouver	503	87.4
18	North Shore	155	85.9
19	Richmond	180	108.4
20	Capital	285	85.1

Campylobacteriosis Rates by Age Group and Sex, 2000



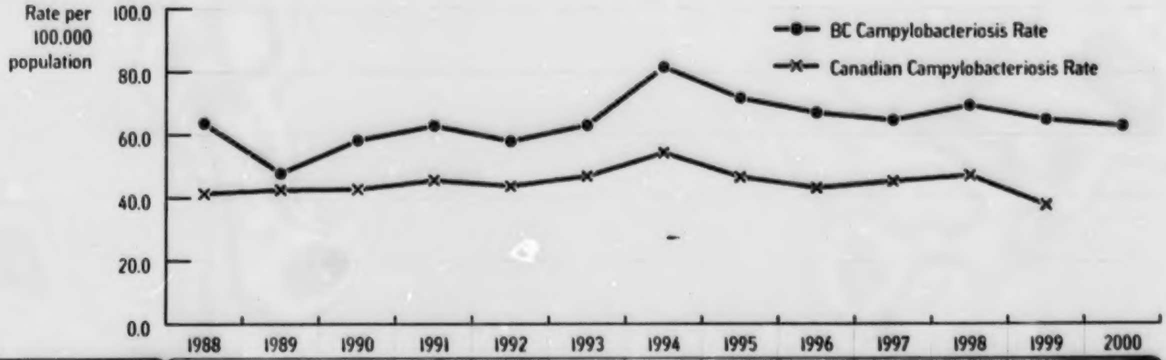
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Campylobacteriosis C[illegible]	8	87	5[illegible]	[illegible]	[illegible]	1[illegible]	11[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Campylobacteriosis Cases – Male	17	111	74	50	79	131	109	213	342	18[illegible]	[illegible]	128[illegible]
Campylobacteriosis Cases – Unk[illegible]	0	0	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Campylobacteriosis R[illegible]	39.5	98.4	47.5	2[illegible]	50[illegible]	95[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Campylobacteriosis Rate – [illegible]	80.0	119.0	57.4	37.2	56.8	96.4	79.0	64.[illegible]	5[illegible]	52.7	[illegible]	[illegible]

Campylobacteriosis

Reporting has remained steady over the past 6 years. In 2000, there were 2,553 reports for a rate of 62.8 cases per 100,000. Reporting was highest during the summer (weeks 25 through 37).

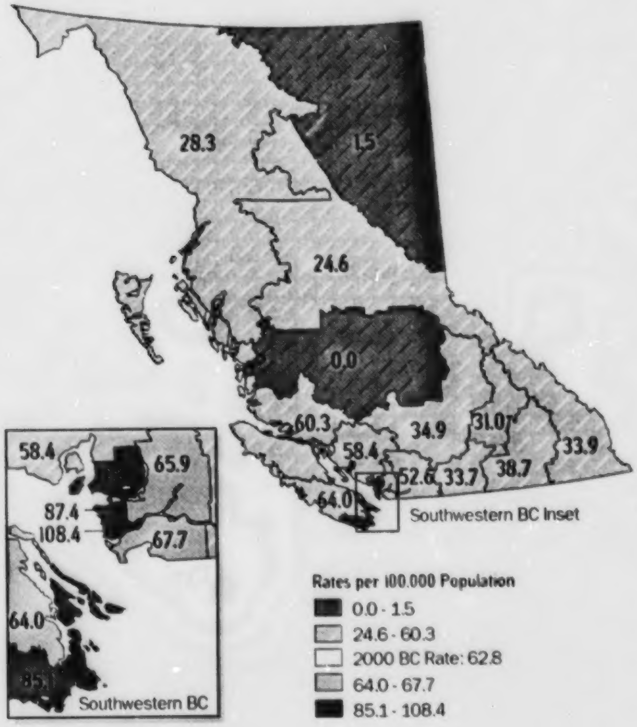
The age distribution of cases followed an expected bimodal distribution, with peak reporting rates in the less than 5 year age group, and the 20 to 24 year age group. The highest reporting rates were generally seen in the Lower Mainland and on Vancouver Island.

Campylobacteriosis Rates by Year, 1988-2000



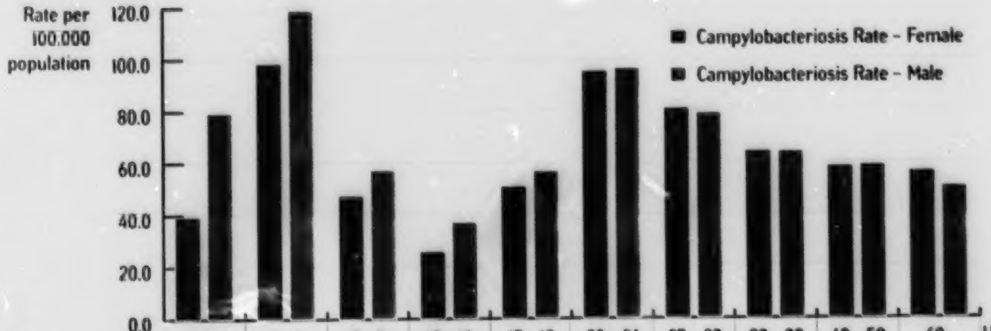
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Campylobacteriosis Cases	1982	1528	1917	2117	2010	2251	2997	2711	2596	2559	2771	2610	255
BC Campylobacteriosis Rate	63.6	47.8	58.2	62.8	57.9	63.0	81.4	71.6	66.9	64.6	69.3	64.9	62.8
Can. Campylobacteriosis Rate	41.4	42.5	42.7	45.5	43.7	46.8	54.2	46.6	43.1	45.2	47.1	37.7	

Campylobacteriosis Rates by Health Region, 2000


28.3
1.5
24.6
0.0
60.3
34.9
31.0
58.4
33.9
52.6
33.7
38.7
64.0
Southwestern BC Inset
58.4
65.9
87.4
108.4
67.7
64.0
85.1
Southwestern BC
Rates per 100,000 Population
0.0 - 1.5
24.6 - 60.3
2000 BC Rate: 62.8
64.0 - 67.7
85.1 - 108.4

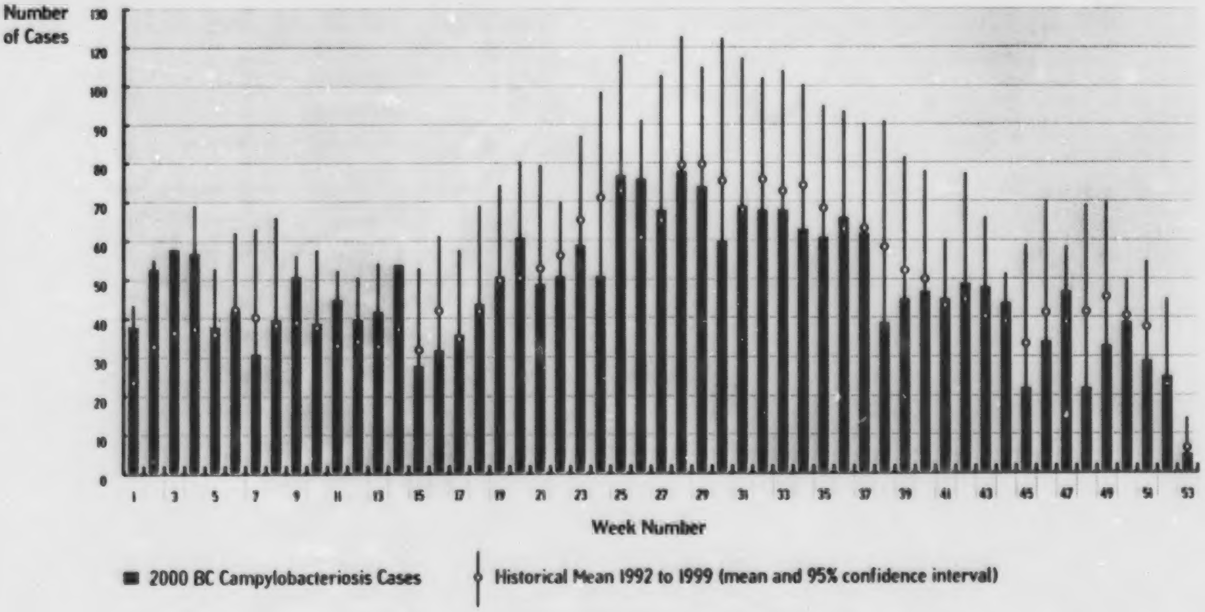
HR	Health Region	Cases	Rate
1	East Kootenay	28	33.9
2	West Kootenay - Boundary	32	38.7
3	North Okanagan	37	31.0
4	South Okanagan - Similkameen	88	37.7
5	Thompson	48	34.9
6	Fraser Valley	128	52.6
7	South Fraser Valley	390	67.7
8	Simon Fraser	341	65.9
9	Coast Garibaldi	47	58.4
10	Central Vancouver Island	157	64.0
11	Upper Island/Central Coast	74	60.3
12	Cariboo	0	0.0
13	North West	26	28.3
14	Peace Liard	1	1.5
15	Northern Interior	33	24.6
16	Vancouver	503	87.4
18	North Shore	155	85.9
19	Richmond	180	108.4
20	Capital	285	85.1

Campylobacteriosis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Campylobacteriosis Cases - Female	8	87	58	33	67	126	111	211	339	215	1	[illegible]
Campylobacteriosis Cases - Male	17	111	74	50	79	131	109	213	342	161	2	1289
Campylobacteriosis Cases - Unknown	0	0	1	0	0	0	1	3	0	3	0	[illegible]
Campylobacteriosis Rate - Female	39.5	98.4	47.5	26.0	50.9	95.4	80.9	64.2	[illegible]	[illegible]		[illegible]
Campylobacteriosis Rate - Male	80.0	119.0	57.4	37.2	56.8	96.4	79.0	64.2	59.0	50.7		63.8

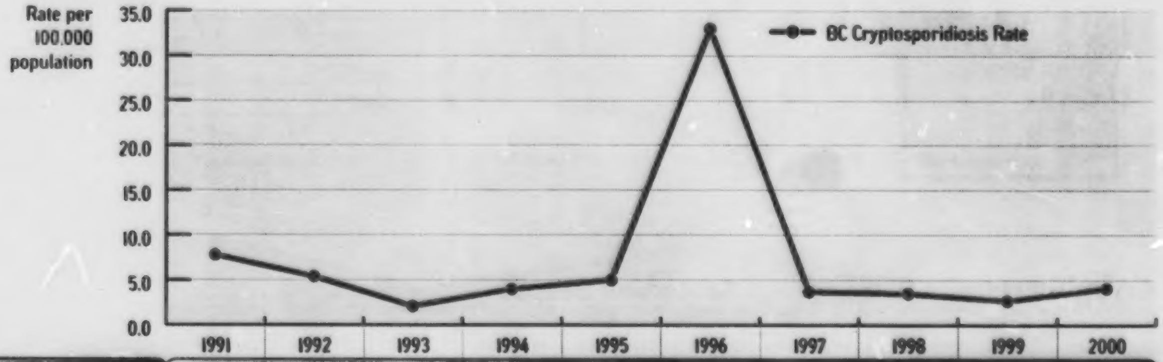
2000 BC Campylobacteriosis Cases by Week Compared to Historical Numbers from 1992 to 1999 (Excluding Outbreak Cases in Weeks 27 and 28 of 1998)



Cryptosporidiosis

One hundred and sixty-seven cases were reported for a rate of 4.1 cases per 100,000. This was higher than 1999, but considerably lower than a peak seen in 1996. Slightly higher reporting was seen during the spring (weeks 14 through 20). No waterborne outbreaks of cryptosporidiosis were identified in 2000 in BC. Peak reporting was seen, as expected, in the under 5 age group. Levels of immunity are higher in older age groups. Males accounted for 51 percent of cases. Thompson had the highest reporting rate at 16.7 cases per 100,000 population.

Cryptosporidiosis Rates by Year, 1991-2000



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Cryptosporidiosis Cases	263	187	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Cryptosporidiosis Rate	7.8	5.4	2.1	4.0	5.0	33.0	3.7	3.5	2.7	4.1

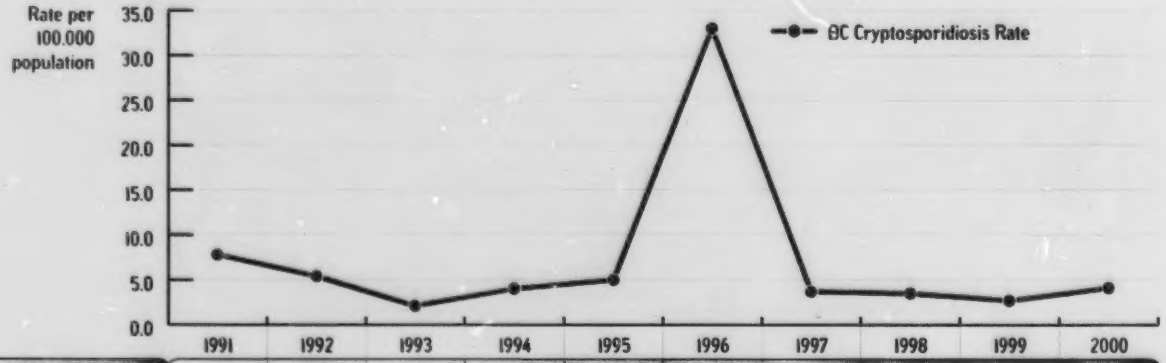
Canadian Rate Unavailable

Cryptosporidiosis

One hundred and sixty-seven cases were reported for a rate of 4.1 cases per 100,000. This was higher than 1999, but considerably lower than a peak seen in 1996. Slightly higher reporting was seen during the spring (weeks 14 through 20). No waterborne outbreaks of cryptosporidiosis were identified in 2000 in BC.

Peak reporting was seen, as expected, in the under 5 age group. Levels of immunity are higher in older age groups. Males accounted for 51 percent of cases. Thompson had the highest reporting rate at 16.7 cases per 100,000 population.

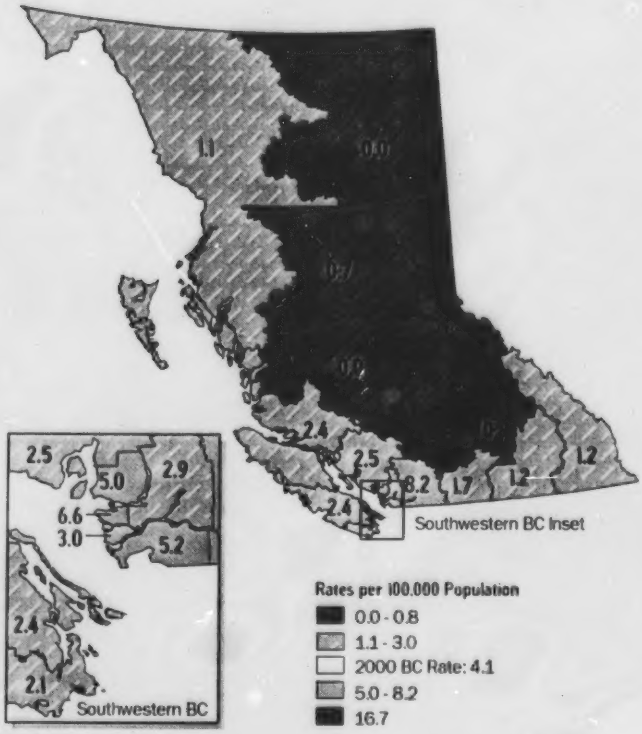
Cryptosporidiosis Rates by Year, 1991-2000



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Cryptosporidiosis Cases	263	187	74	149	189	1283	145	141	110	167
BC Cryptosporidiosis Rate	7.8	5.4	2.1	4.0	5.0	33.0	3.7	3.5	2.7	4.1

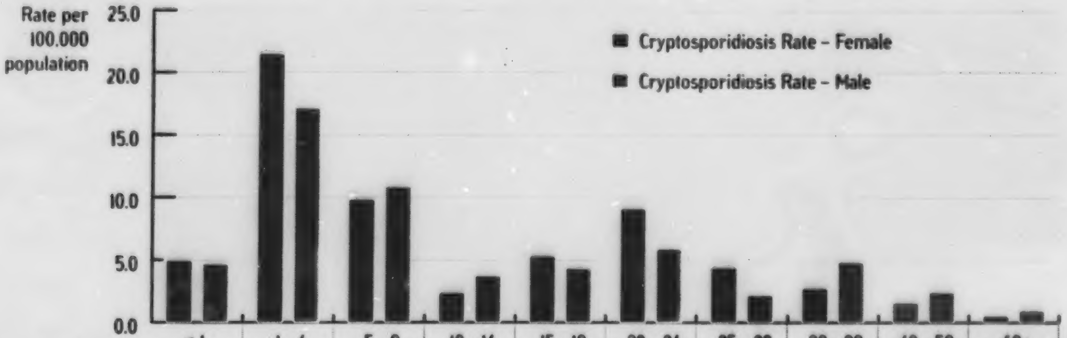
Canadian Rate Unavailable

Cryptosporidiosis Rates by Health Region, 2000


1.1
0.0
0.7
0.9
0.7
2.4
2.5
8.2
1.7
1.2
1.2
2.4
Southwestern BC Inset
2.5
5.0
2.9
6.6
3.0
5.2
2.4
2.1
Southwestern BC
Rates per 100,000 Population
0.0 - 0.8
1.1 - 3.0
2000 BC Rate: 4.1
5.0 - 8.2
16.7

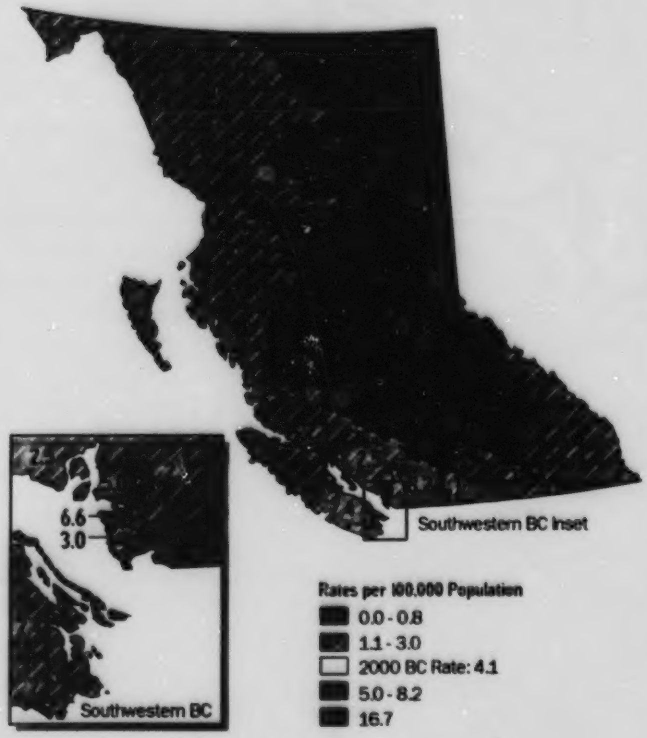
HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	4	1.7
5	Thompson	23	16.7
6	Fraser Valley	20	8.2
7	South Fraser Valley	30	5.2
8	Simon Fraser	15	2.9
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	6	2.4
11	Upper Island/Central Coast	3	2.4
12	Cariboo	0	0.0
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	38	6.6
18	North Shore	3	1.7
19	Richmond	5	3.0
20	Capital	7	2.1

Cryptosporidiosis Rates by Age Group and Sex, 2000



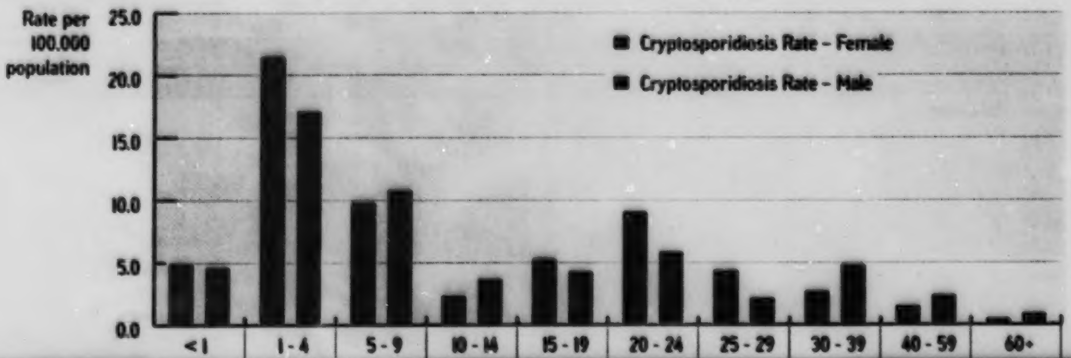
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Cryptosporidiosis Cases – Fe	1	19	12	3	7	12	6	[illegible]	[illegible]	[illegible]	[illegible]
Cryptosporidiosis Cases – Male	1	16	14	5	6	8	3	16	14	3	86
Cryptosporidiosis Cases - Unknow	0	0	0	0	1	0	0	0	0	0	[illegible]
Cryptosporidiosis Rate – Fe	4.9	21.5	9.8	2.4	5.3	9.1	4.4	[illegible]	[illegible]	[illegible]	[illegible]
Cryptosporidiosis Rate – Male	4.7	17.2	10.9	3.7	4.3	5.9	2.2	4.8	2.4	0.9	4.3

Cryptosporidiosis Rates by Health Region, 2000


6.6
3.0
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0 - 0.8
1.1 - 3.0
2000 BC Rate: 4.1
5.0 - 8.2
16.7

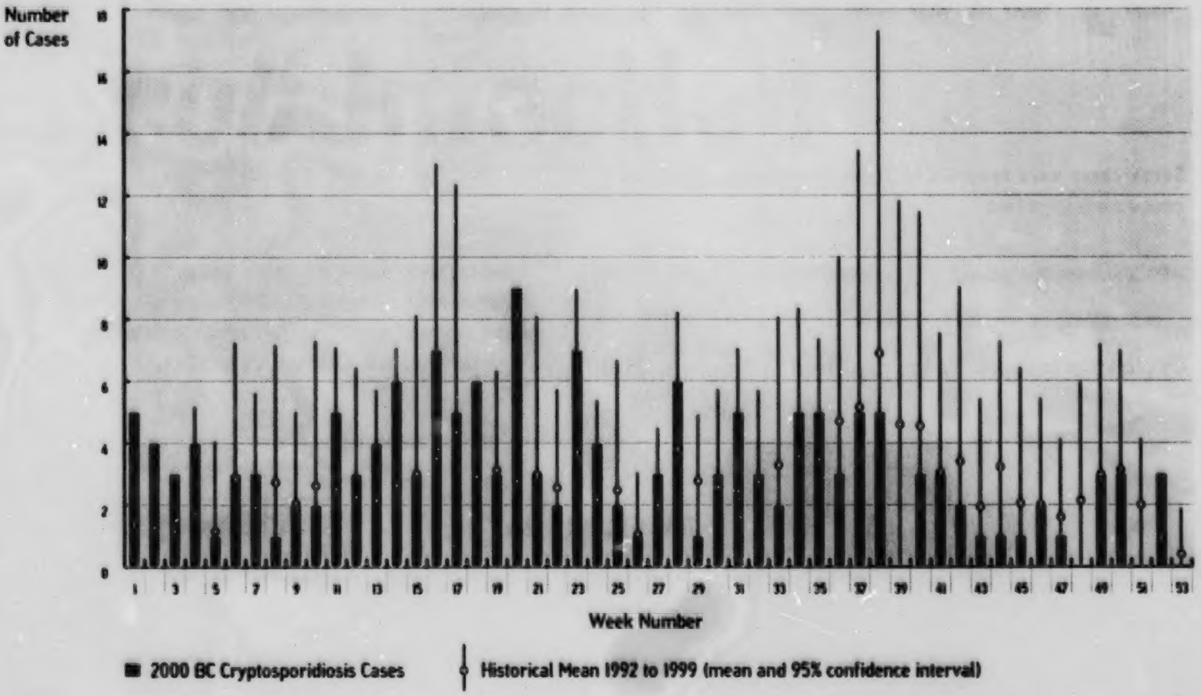
HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	4	1.7
5	Thompson	23	16.7
6	Fraser Valley	20	8.2
7	South Fraser Valley	30	5.2
8	Simon Fraser	15	2.9
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	6	2.4
11	Upper Island/Central Coast	3	2.4
12	Cariboo	0	0.0
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	38	6.6
18	North Shore	3	1.7
19	Richmond	5	3.0
20	Capital	7	2.1

Cryptosporidiosis Rates by Age Group and Sex, 2000



	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+	Total
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cryptosporidiosis Cases - M[illegible]	1	16	14	5	6	8	3	[illegible]	[illegible]	[illegible]	[illegible]
Cryptosporidiosis [illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cryp[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cryptosporidi[illegible]	4.7	17.2	10.9	[illegible]	4.3	5.9	2.2	[illegible]	[illegible]	[illegible]	[illegible]

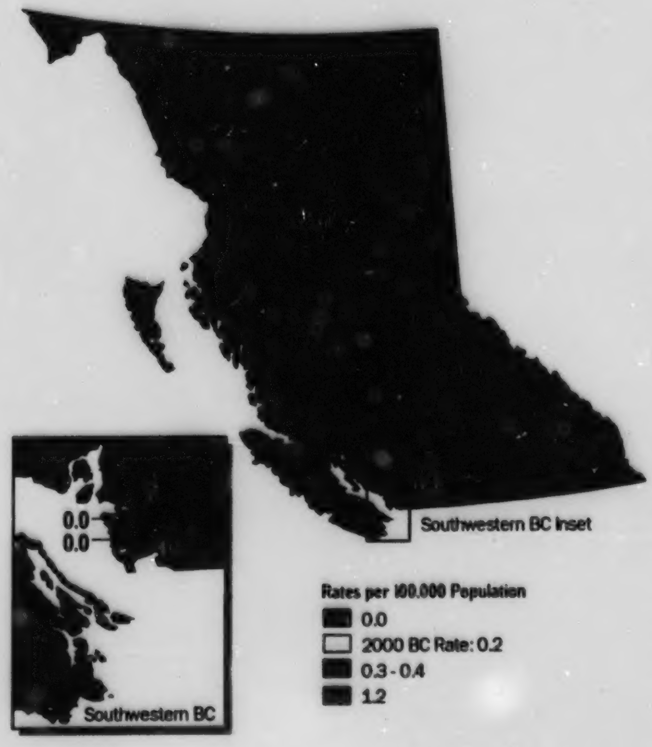
2000 BC Cryptosporidiosis Cases by Week Compared to Historical Numbers from 1992 to 1999 (Excluding Outbreak Cases in Weeks 26 through 47 of 1996)



Cyclosporidiosis

Seven cases were reported in 2000. No endemically acquired cases were identified.

Cyclosporidiosis Rates by Health Region, 2000


0.0
0.0
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
☐ 2000 BC Rate: 0.2
0.3 - 0.4
1.2

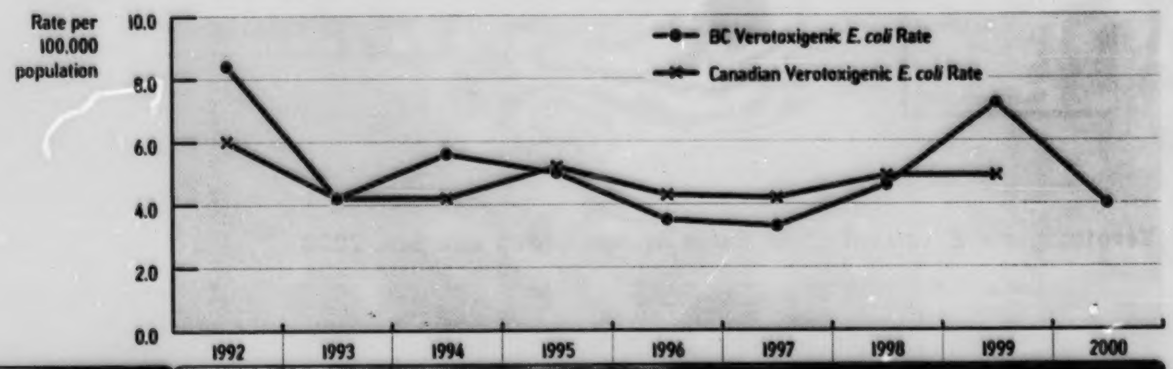
HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	1	0.4
7	South Fraser Valley	2	0.3
8	Simon Fraser	0	0.0
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	0	0.0
11	Upper Island/Central Coast	0	0.0
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	0	0.0
18	North Shore	0	0.0
19	Richmond	0	0.0
20	Capital	4	1.2

Verotoxigenic *E. coli* Infection

Reporting fell in 2000 to 163 cases for a rate of 4.0 cases per 100,000. The highest reporting rates were seen in South Okanagan-Similkameen, North Okanagan, and Northern Interior. Reporting was highest during the summer and early fall (weeks 24 –37). Children under 5 had the highest reporting rate.

A cluster of 7 cases of VT2 *E. coli* O121:H19 was identified in June/July. A common source was not identified.

Verotoxigenic *E. coli* Infection Rates by Year, 1992-2000



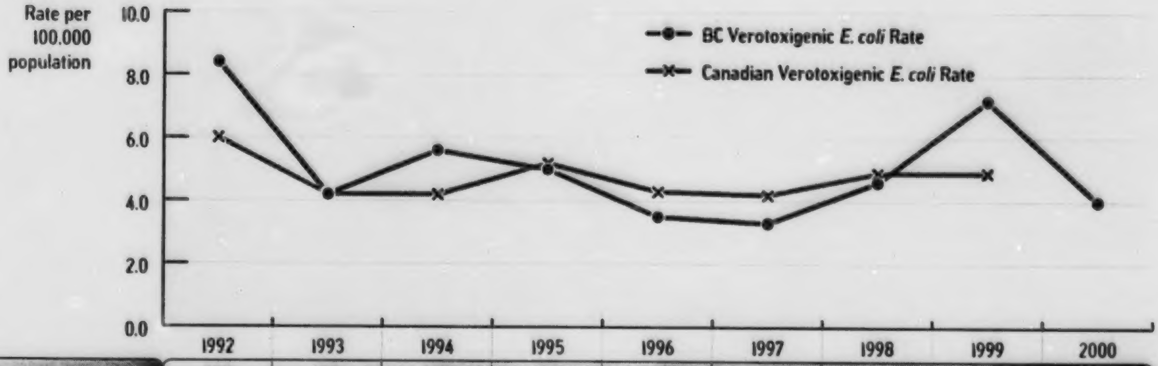
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Verotox[illegible]	292	150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Verotoxigenic *E. coli* Rate	8.4	4.2	5.6	5.0	3.5	3.3	4.6	7.2	4.0
Can. Verotox[illegible]	6.0	4.2	4.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Verotoxigenic *E. coli* Infection

Reporting fell in 2000 to 163 cases for a rate of 4.0 cases per 100,000. The highest reporting rates were seen in South Okanagan-Similkameen, North Okanagan, and Northern Interior. Reporting was highest during the summer and early fall (weeks 24 –37). Children under 5 had the highest reporting rate.

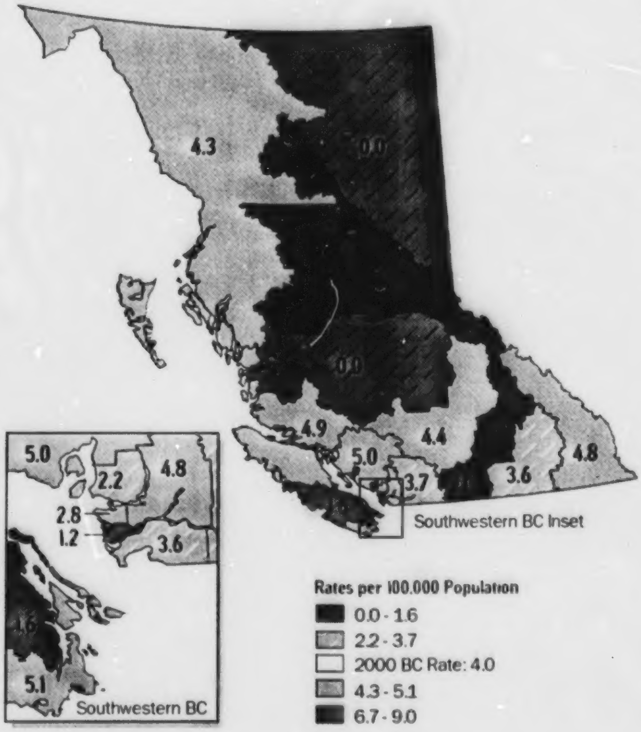
A cluster of 7 cases of VT2 *E. coli* 0121:H19 was identified in June/July. A common source was not identified.

Verotoxigenic *E. coli* Infection Rates by Year, 1992-2000



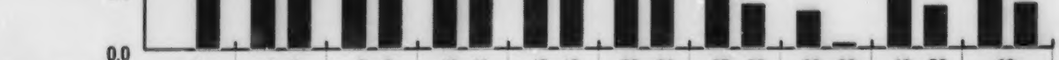
	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Verotoxigenic *E. coli* Cases	292	150	205	189	137	132	183	288	163
BC Verotoxigenic *E. coli* Rate	8.4	4.2	5.6	5.0	3.5	3.3	4.6	7.2	4.0
Can. Verotoxigenic *E. coli* Rate	6.0	4.2	4.2	5.2	4.3	4.2	4.9	4.9	

Verotoxigenic *E. coli* Infection Rates by Health Region, 2000


4.3
0.0
0.0
4.9
4.4
5.0
3.7
3.6
4.8
Southwestern BC Inset
5.0
2.2
4.8
2.8
1.2
3.6
1.6
5.1
Southwestern BC
Rates per 100,000 Population
0.0 - 1.6
2.2 - 3.7
2000 BC Rate: 4.0
4.3 - 5.1
6.7 - 9.0

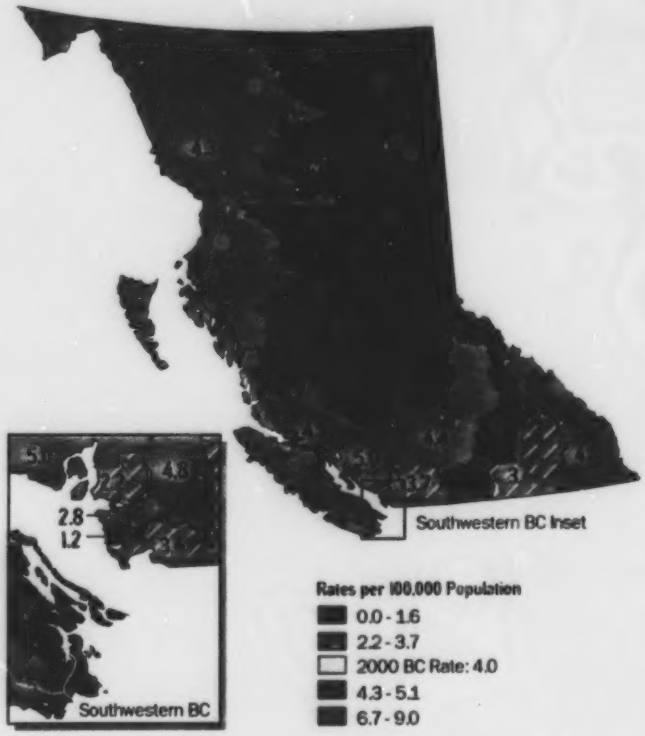
HR	Health Region	Cases	Rate
1	East Kootenay	4	4.8
2	West Kootenay - Boundary	3	3.6
3	North Okanagan	8	6.7
4	South Okanagan - Similkameen	21	9.0
5	Thompson	6	4.4
6	Fraser Valley	9	3.7
7	South Fraser Valley	21	3.6
8	Simon Fraser	25	4.8
9	Coast Garibaldi	4	5.0
10	Central Vancouver Island	4	1.6
11	Upper Island/Central Coast	6	4.9
12	Cariboo	0	0.0
13	North West	4	4.3
14	Peace Liard	0	0.0
15	Northern Interior	9	6.7
16	Vancouver	16	2.8
18	North Shore	4	2.2
19	Richmond	2	1.2
20	Capital	17	5.1

Verotoxigenic *E. coli* Infection Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Verotoxigenic *E. coli* Cases - Female	0	12	9	5	7	4	5	6	[illegible]	[illegible]	[illegible]
Verotoxigenic *E. coli* Cases - Male	1	12	11	4	8	11	3	1	12	7	70
Verotoxigenic *E. coli* Cases - Unknown	0	0	0	0	0	0	0	0	0	[illegible]	1
Verotoxigenic *E. coli* Rate - Female	0.0	13.6	7.4	3.9	5.3	3.0	3.6	1.8	[illegible]	[illegible]	[illegible]
Verotoxigenic *E. coli* Rate - Male	4.7	12.9	8.5	3.0	5.8	8.0	2.2	0.3	2.1	2.2	3.5

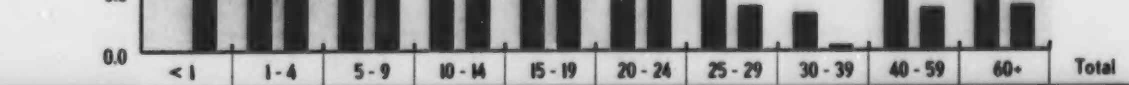
Verotoxigenic *E. coli* Infection Rates by Health Region, 2000



Rates per 100,000 Population
- ■ 0.0 - 1.6
- ■ 2.2 - 3.7
- ☐ 2000 BC Rate: 4.0
- ■ 4.3 - 5.1
- ■ 6.7 - 9.0

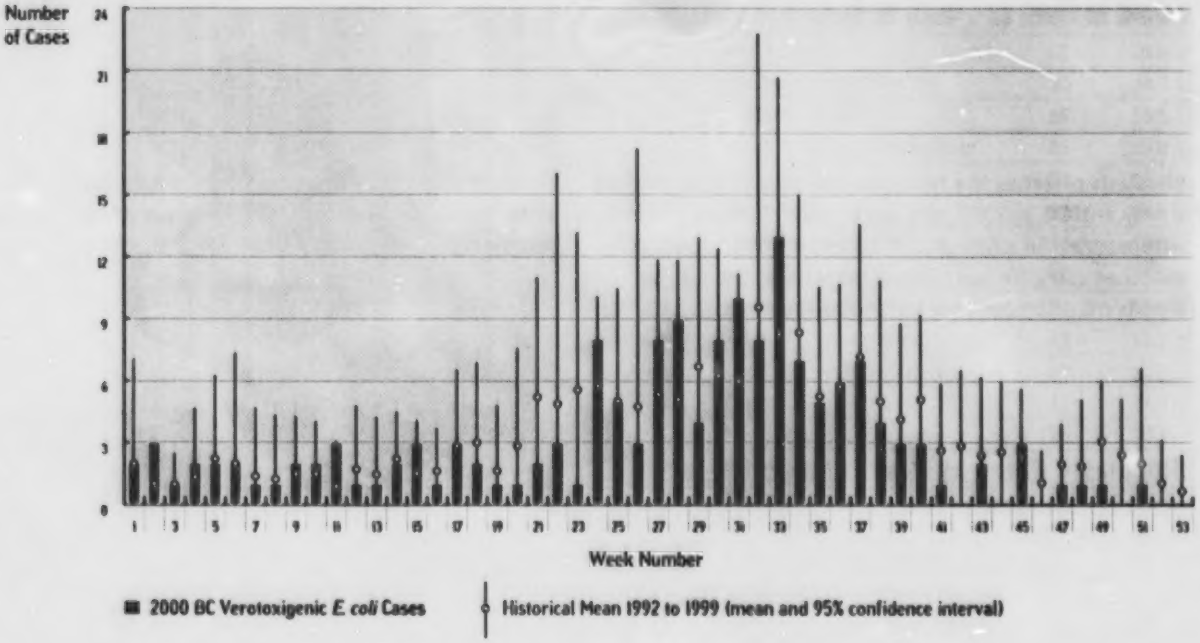
HR	Health Region	Cases	Rate
1	East Kootenay	4	4.8
2	West Kootenay - Boundary	3	3.6
3	North Okanagan	8	6.7
4	South Okanagan - Similkameen	21	9.0
5	Thompson	6	4.4
6	Fraser Valley	9	3.7
7	South Fraser Valley	21	3.6
8	Simon Fraser	25	4.8
9	Coast Garibaldi	4	5.0
10	Central Vancouver Island	4	1.6
11	Upper Island/Central Coast	6	4.9
12	Cariboo	0	0.0
13	North West	4	4.3
14	Peace Liard	0	0.0
15	Northern Interior	9	6.7
16	Vancouver	16	2.8
18	North Shore	4	2.2
19	Richmond	2	1.2
20	Capital	17	5.1

Verotoxigenic *E. coli* Infection Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
[illegible]	0	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Verotoxigenic E. coli Cases - Male	1	12	11	4	8	11	3	1	[illegible]	[illegible]	[illegible]
Verotoxigenic E. coli Cases - [illegible]	0	9	9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Verotoxigenic [illegible]	0.0	13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Verotoxigenic E. coli Rate - Male	4.7	12.9	8.5	3.0	5.8	8.2	2.2	0.3	[illegible]	[illegible]	[illegible]

2000 BC Verotoxigenic *E. coli* Infection Cases by Week Compared to Historical Numbers from 1992 to 1999 (Excluding Outbreak Cases in Week 44 through 48 of 1999)

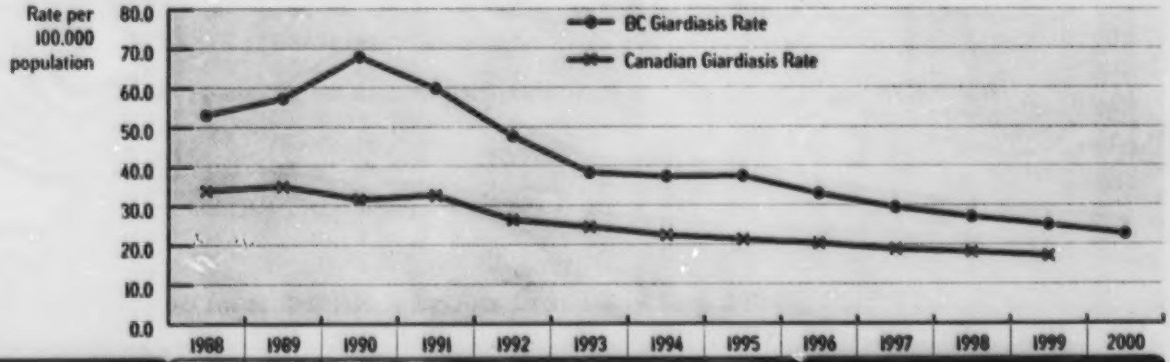


Giardiasis

Giardiasis reporting has fallen by more than 50 percent since a peak in 1990. In 2000, nine hundred and twenty-six cases were reported for a rate of 22.8 cases per 100,000. Reporting increased during the summer and fall (weeks 25 to 39). No waterborne outbreaks were identified during the year.

Reported cases followed a bimodal age distribution with peaks in the 1 to 4 year, and the 20 to 39 year age groups. Vancouver had the highest rate at 41.9 cases per 100,000.

Giardiasis Rates by Year, 1988-2000



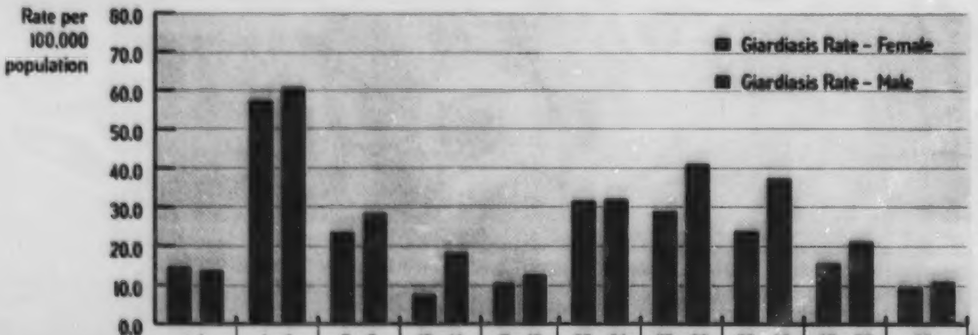
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Giardiasis [illegible]	1655	1813	2235	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Giardiasis Rate	53.1	57.3	67.9	59.9	47.7	38.4	37.4	37.5	33.0	29.5	27.1	25.1	22.8
Canadian Giardiasis [illegible]	33.9	35.0	31.7	32.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Giardiasis Rates by Health Region, 2000

41.9
9.6
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0 - 9.6
14.3 - 22.7
2000 BC Rate: 22.8
24.2 - 30.9
41.9

HR	Health Region	Cases	Rate
1	East Kootenay	18	21.8
2	West Kootenay - Boundary	20	24.2
3	North Okanagan	18	15.1
4	South Okanagan - Similkameen	35	15.0
5	Thompson	27	19.6
6	Fraser Valley	62	25.5
7	South Fraser Valley	114	19.8
8	Simon Fraser	98	18.9
9	Coast Garibaldi	24	29.8
10	Central Vancouver Island	41	16.7
11	Upper Island/Central Coast	38	30.9
12	Cariboo	11	14.3
13	North West	26	28.3
14	Peace Liard	0	0.0
15	Northern Interior	21	15.7
16	Vancouver	241	41.9
18	North Shore	41	22.7
19	Richmond	16	9.6
20	Capital	75	22.4

Giardiasis Rates by Age Group and Sex, 2000



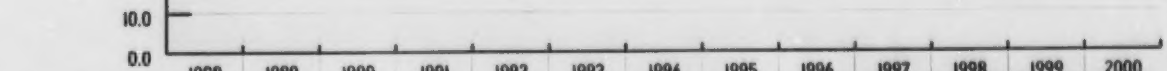
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Giardiasis [illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Giardiasis Cas[illegible]	3	57	37	25	18	44	57	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Giardiasis [illegible]	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	14.8	57.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Giardiasis R[illegible]	14.0	61.0	28.7	[illegible]	12.9	32.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Giardiasis

Giardiasis reporting has fallen by more than 50 percent since a peak in 1990. In 2000, nine hundred and twenty-six cases were reported for a rate of 22.8 cases per 100,000. Reporting increased during the summer and fall (weeks 25 to 39). No waterborne outbreaks were identified during the year.

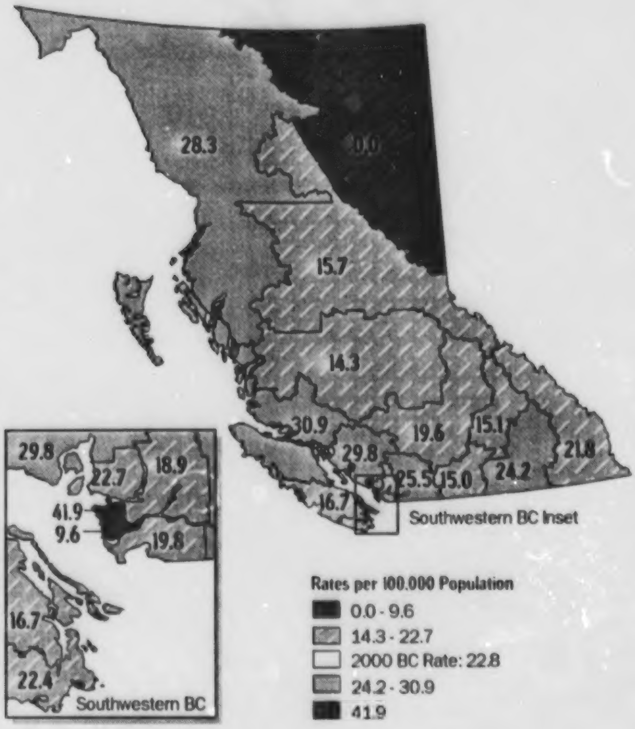
Reported cases followed a bimodal age distribution with peaks in the 1 to 4 year, and the 20 to 39 year age groups. Vancouver had the highest rate at 41.9 cases per 100,000.

Giardiasis Rates by Year, 1988-2000



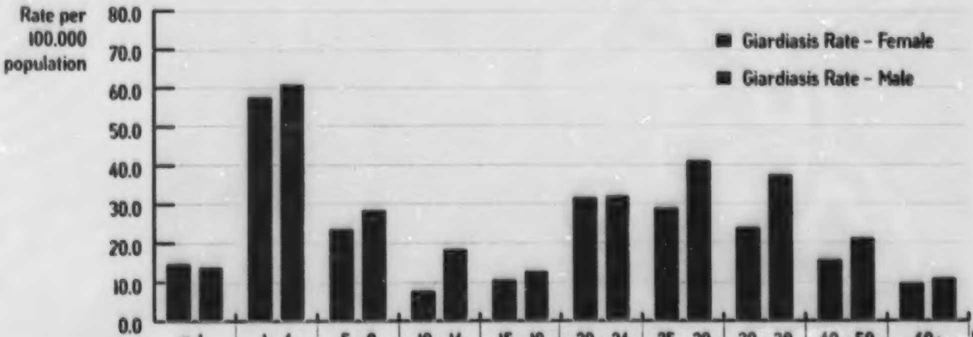
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Giardiasis Cases	1655	1833	2235	2021	1654	1372	1378	1420	1281	[illegible]	1083	[illegible]	[illegible]
BC Giardiasis Rate	53.1	57.3	67.9	59.9	47.7	38.4	37.4	37.5	33.0	29.5	27.1	25.1	22.8
Canadian Giardiasis Rate	33.9	35.0	31.7	32.7	26.4	24.6	22.5	21.4	20.4	[illegible]	[illegible]	17.2	

Giardiasis Rates by Health Region, 2000


28.3
0.0
15.7
14.3
30.9
19.6
15.1
21.8
29.8
25.5
15.0
24.2
16.7
Southwestern BC Inset
29.8
22.7
18.9
41.9
9.6
19.8
16.7
22.4
Southwestern BC
Rates per 100,000 Population
0.0 - 9.6
14.3 - 22.7
2000 BC Rate: 22.8
24.2 - 30.9
41.9

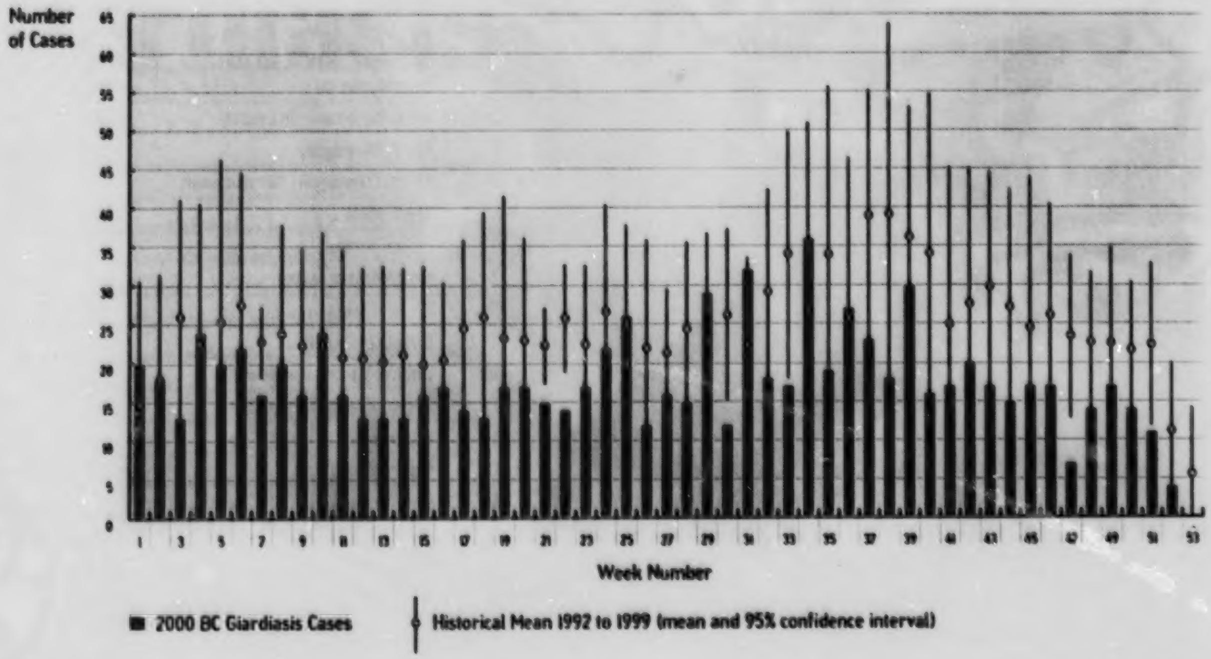
HR	Health Region	Cases	Rate
1	East Kootenay	18	21.8
2	West Kootenay - Boundary	20	24.2
3	North Okanagan	18	15.1
4	South Okanagan - Similkameen	35	15.0
5	Thompson	27	19.6
6	Fraser Valley	62	25.5
7	South Fraser Valley	114	19.8
8	Simon Fraser	98	18.9
9	Coast Garibaldi	24	29.8
10	Central Vancouver Island	41	16.7
11	Upper Island/Central Coast	38	30.9
12	Cariboo	11	14.3
13	North West	26	28.3
14	Peace Liard	0	0.0
15	Northern Interior	21	15.7
16	Vancouver	241	41.9
18	North Shore	41	22.7
19	Richmond	16	9.6
20	Capital	75	22.4

Giardiasis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Giardiasis Cases – Fem	3	51	29	10	14	42	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Giardiasis Cases – Male	3	57	37	25	18	44	57	125	124	35	1	526
Giardiasis Cases – Unknow	0	0	0	0	0	1	0	0	[illegible]	[illegible]	[illegible]	[illegible]
Giardiasis Rate – Fem	14.8	57.7	23.7	7.9	10.8	31.8	[illegible]	24.0	[illegible]	[illegible]	[illegible]	[illegible]
Giardiasis Rate – Male	14.0	61.0	28.7	18.6	12.9	32.4	41.3	37.7	21.4	11.0		26.0

2000 BC Giardiasis Cases by Week Compared to Historical Numbers from 1992 to 1999



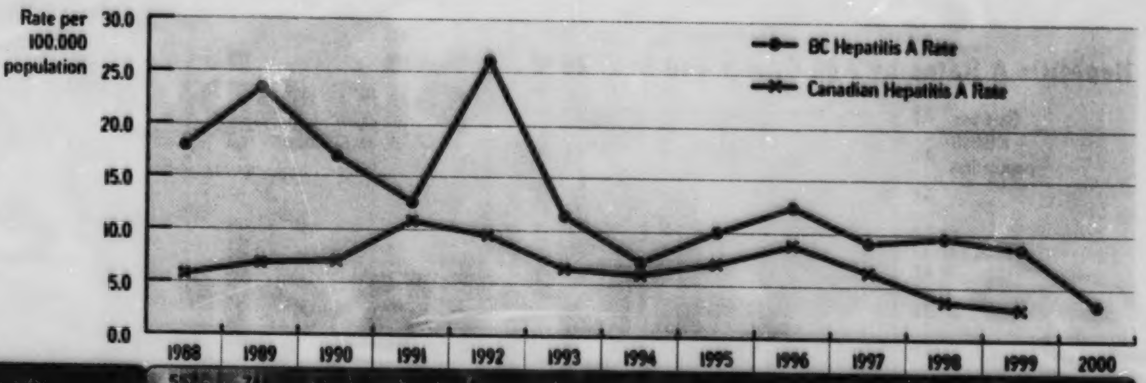
Hepatitis A

In 2000, hepatitis A reporting fell to its lowest level in over a decade. One hundred and thirty-six cases were reported for a rate of 3.3 cases per 100,000 population. Fifty-six percent of cases were males. The highest rate among males was in those 40 to 59 years of age, whereas in females, the rate was highest in those 5 to 9 years of age. The highest regional rate was in Cariboo at 33.7 cases per 100,000.

Reporting of hepatitis A in Vancouver has shown a marked decline from 22.9 cases per 100,000 in 1998 to 3.0 cases per 100,000 in 2000. Much of this decline can be attributed to immunization of high risk groups including injection drug users and men who have sex with men in Vancouver.

In the first quarter of the year, an outbreak of 19 confirmed cases of hepatitis A was identified in Quesnel. More than half the cases were children. An investigation by Cariboo CHSS and BCCDC found that transmission was occurring among cases in a number of different settings. An outbreak control program using Hepatitis A vaccine targeted children between 1 and 12 years of age. The immunization program was successful at preventing ongoing transmission.

Hepatitis A Rates by Year, 1988-2000



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Hep	557	74	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Hepatitis A Rate	17.9	23.4	16.9	12.6	26.1	11.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cana	5.7	6.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Hepatitis A

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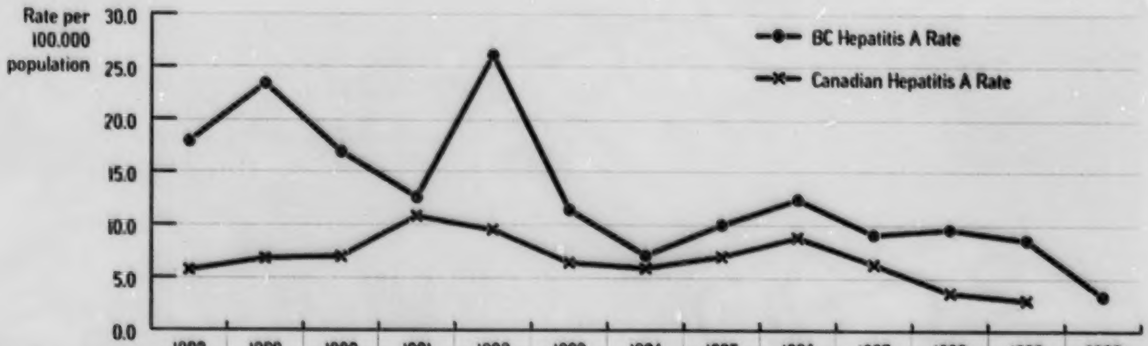
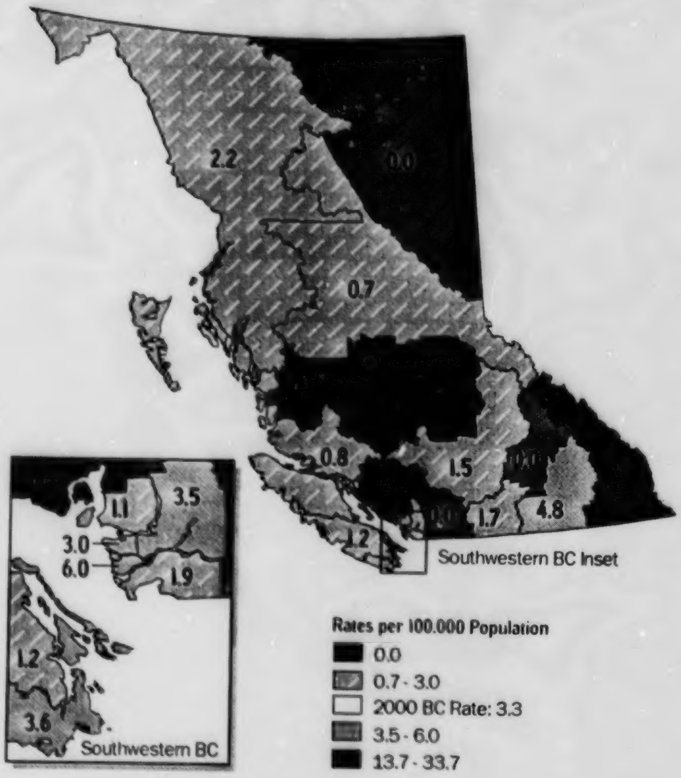
Hepatitis A Rates by Year, 1988-2000



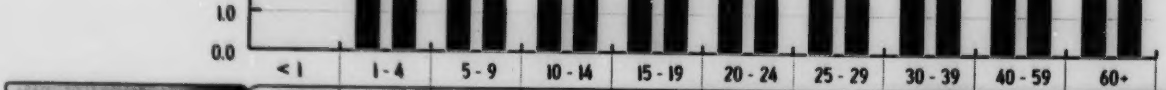
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Hepatitis A Cases	557	749	556	425	906	408	261	378	481	[illegible]	[illegible]	[illegible]	[illegible]
BC Hepatitis A Rate	17.9	23.4	16.9	12.6	26.1	11.4	7.1	10.0	12.4	9.1	9.6	8.6	3.3
Canadian Hepatitis A Rate	5.7	6.8	7.0	10.8	9.5	6.4	5.9	7.0	8.8	6.3	[illegible]	[illegible]	

Hepatitis A Rates by Health Region, 2000


2.2
0.0
0.7
0.8
1.5
0.0
0.0
1.7
4.8
1.2
Southwestern BC Inset
1.1
3.5
3.0
6.0
1.9
1.2
3.6
Southwestern BC
Rates per 100,000 Population
■ 0.0
▨ 0.7 - 3.0
☐ 2000 BC Rate: 3.3
▩ 3.5 - 6.0
■ 13.7 - 33.7

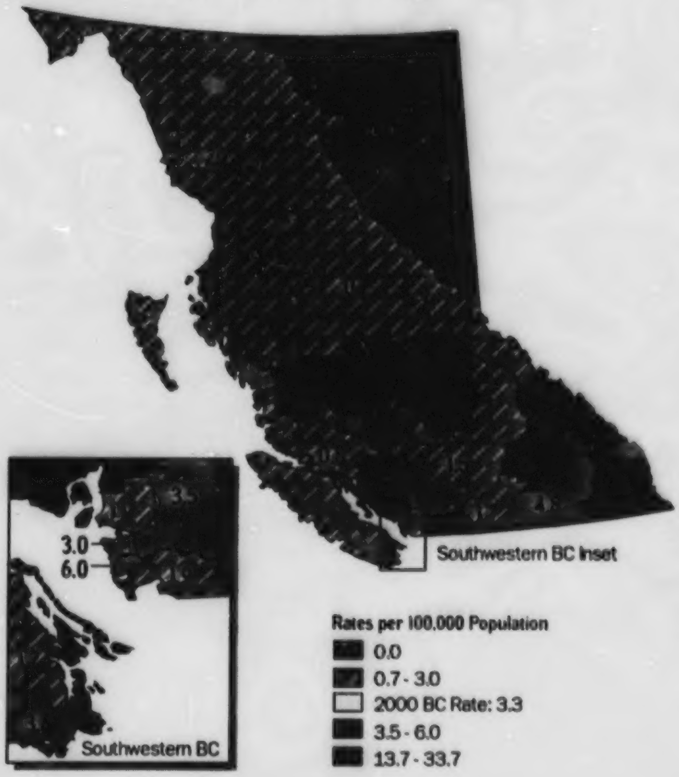
HR	Health Region	Cases	Rate
1	East Kootenay	12	14.5
2	West Kootenay - Boundary	4	4.8
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	4	1.7
5	Thompson	2	1.5
6	Fraser Valley	0	0.0
7	South Fraser Valley	11	1.9
8	Simon Fraser	18	3.5
9	Coast Garibaldi	11	13.7
10	Central Vancouver Island	3	1.2
11	Upper Island/Central Coast	1	0.8
12	Cariboo	26	33.7
13	North West	2	2.2
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	17	3.0
18	North Shore	2	1.1
19	Richmond	10	6.0
20	Capital	12	3.6

Hepatitis A Rates by Age Group and Sex, 2000



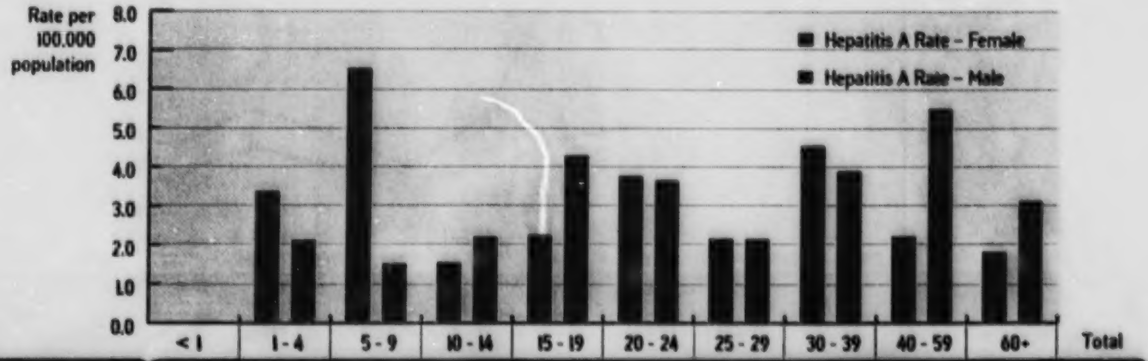
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Hepatitis A Cases – Female	0	3	8	2	3	5	3	[illegible]	[illegible]	[illegible]	[illegible]
Hepatitis A Cases – Male	0	2	2	3	6	5	3	13	32	10	76
Hepatitis A Cases – Unknown	0	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]
Hepatitis A Rate – Female	0.0	3.4	6.5	1.6	2.3	3.8	2.2	[illegible]	[illegible]	[illegible]	[illegible]
Hepatitis A Rate – Male	0.0	2.1	1.6	2.2	4.3	3.7	2.2	3.9	5.5	3.2	3.8

Hepatitis A Rates by Health Region, 2000


3.5
3.0
6.0
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0
0.7 - 3.0
2000 BC Rate: 3.3
3.5 - 6.0
13.7 - 33.7

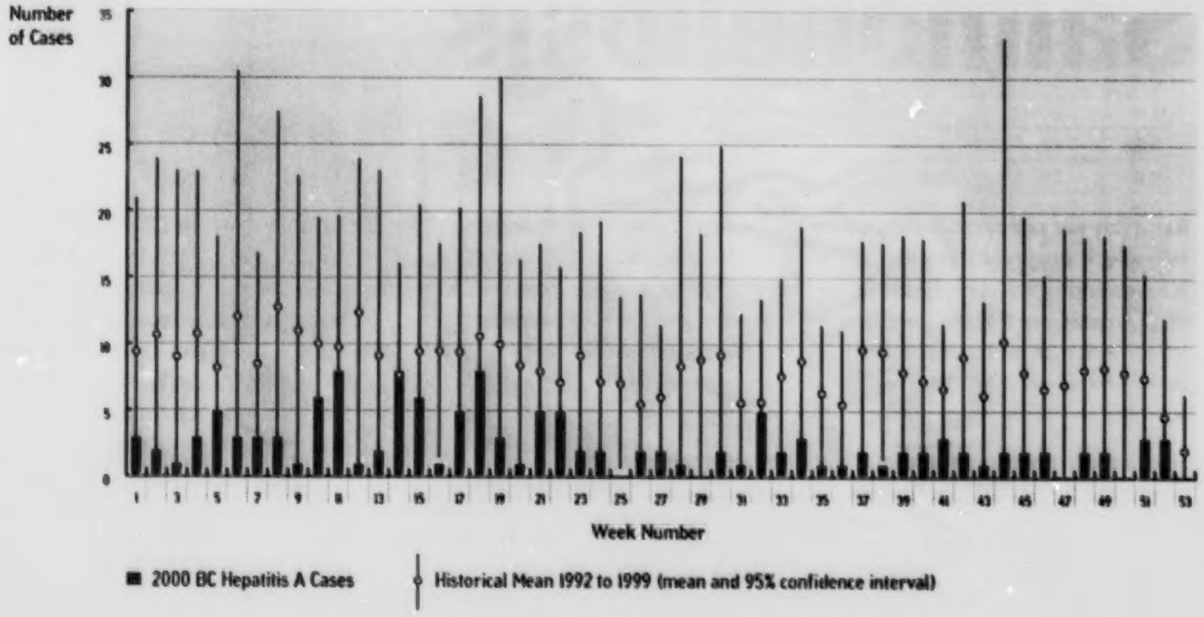
HR	Health Region	Cases	Rate
1	East Kootenay	12	14.5
2	West Kootenay - Boundary	4	4.8
3	North Okanagan	0	0.0
4	South Okanagan - Similkameen	4	1.7
5	Thompson	2	1.5
6	Fraser Valley	0	0.0
7	South Fraser Valley	11	1.9
8	Simon Fraser	18	3.5
9	Coast Garibaldi	11	13.7
10	Central Vancouver Island	3	1.2
11	Upper Island/Central Coast	1	0.8
12	Cariboo	26	33.7
13	North West	2	2.2
14	Peace Liard	0	0.0
15	Northern Interior	1	0.7
16	Vancouver	17	3.0
18	North Shore	2	1.1
19	Richmond	10	6.0
20	Capital	12	3.6

Hepatitis A Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Hepatitis A [illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hepatitis A Cases – Mal[illegible]	0	2	2	3	6	5	3	13	[illegible]	[illegible]	[illegible]
Hepatitis A Cases – Unkn[illegible]	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hepati[illegible]	0.0	3.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Hepatitis A R[illegible] Mal[illegible]	0.0	2.1	1.6	2.2	[illegible]	3.7	2.2	[illegible]	[illegible]	[illegible]	[illegible]

2000 BC Hepatitis A Cases by Week Compared to Historical Numbers from 1992 to 1999



Listeriosis

Six cases were reported in 2000.

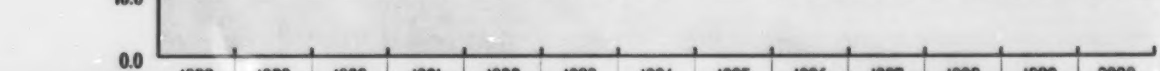
Salmonellosis

Reporting has remained stable over the past 4 years, after following a downward trend over the preceding decade. Six hundred and eighty-four cases were reported in 2000 for a rate of 16.8 cases per 100,000. The reporting rate was highest in infants less than 1 year of age. Richmond had the highest rate at 43.9 cases per 100,000, more than double the provincial average.

For details on Salmonella serotypes identified during the year, please see the BCCDC Laboratory Services annual report.

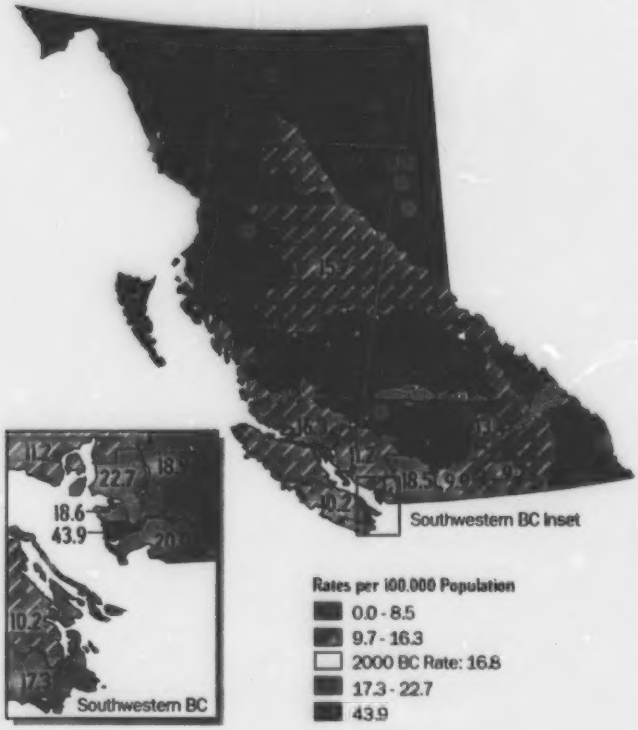
In August and September, an outbreak of 52 cases of *Salmonella enteritidis* infection was identified in the Lower Mainland. An investigation by Richmond Health Services, surrounding health regions, and the BC Centre for Disease Control, determined that the source was contaminated baked goods produced at a bakery in Richmond. Eggs used at the bakery were traced to a BC producer. The Canadian Food Inspection Agency subsequently determined that *Salmonella enteritidis* was cultured from environmental samples taken from the egg producer. Further eggs from the producer were diverted to pasteurization.

Salmonellosis Rates by Year, 1988-2000



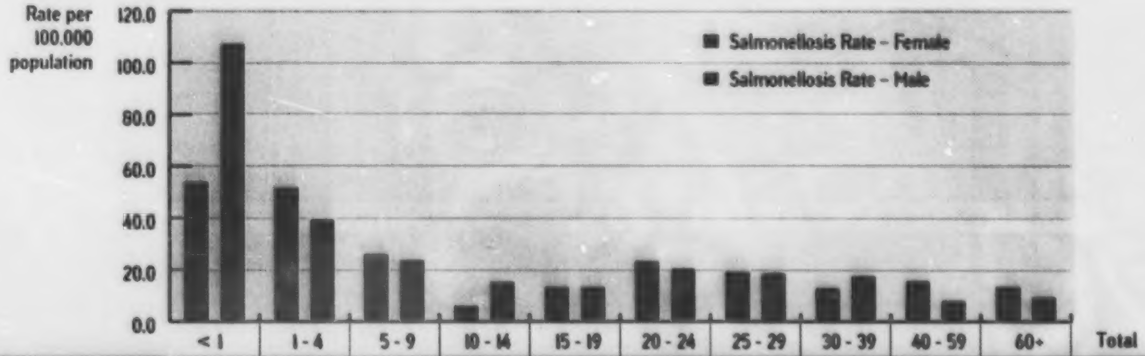
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Salmonellosis C	1376	1021	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Salmonellosis Rate	44.2	31.9	30.2	34.8	27.1	27.8	22.9	22.8	21.3	16.3	16.3	[illegible]	[illegible]
Can. Salmonellosis R	43.4	39.1	32.3	32.3	[illegible]	[illegible]	22.1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Salmonellosis Rates by Health Region, 2000


15.7
16.3
18.6
11.2
18.5
9.9
9.9
10.2
11.2
22.7
18.9
18.6
43.9
20.0
10.2
17.3
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0 - 8.5
9.7 - 16.3
2000 BC Rate: 16.8
17.3 - 22.7
43.9

HR	Health Region	Cases	Rate
1	East Kootenay	7	8.5
2	West Kootenay - Boundary	8	9.7
3	North Okanagan	16	13.4
4	South Okanagan - Similkameen	23	9.9
5	Thompson	9	6.5
6	Fraser Valley	45	18.5
7	South Fraser Valley	115	20.0
8	Simon Fraser	98	18.9
9	Coast Garibaldi	9	11.2
10	Central Vancouver Island	25	10.2
11	Upper Island/Central Coast	20	16.3
12	Cariboo	2	2.6
13	North West	7	7.6
14	Peace Liard	0	0.0
15	Northern Interior	21	15.7
16	Vancouver	107	18.6
18	North Shore	41	22.7
19	Richmond	73	43.9
20	Capital	58	17.3

Salmonellosis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Salmonellosis Ca[illegible]	11	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Salmonellosis Cases – M[illegible]	23	37	31	21	19	28	26	[illegible]	[illegible]	[illegible]	[illegible]
Salmone[illegible]	54.3	52.0	26.2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Salmonellosis Ra[illegible] – M[illegible]	107.7	39.7	24.0	15.6	13.7	20.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

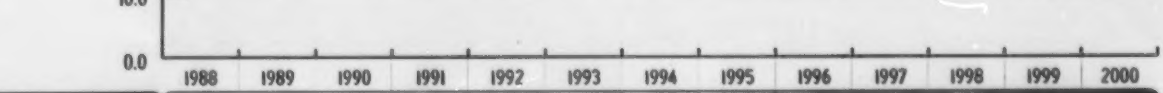
Salmonellosis

Reporting has remained stable over the past 4 years, after following a downward trend over the preceding decade. Six hundred and eighty-four cases were reported in 2000 for a rate of 16.8 cases per 100,000. The reporting rate was highest in infants less than 1 year of age. Richmond had the highest rate at 43.9 cases per 100,000, more than double the provincial average.

For details on Salmonella serotypes identified during the year, please see the BCCDC Laboratory Services annual report.

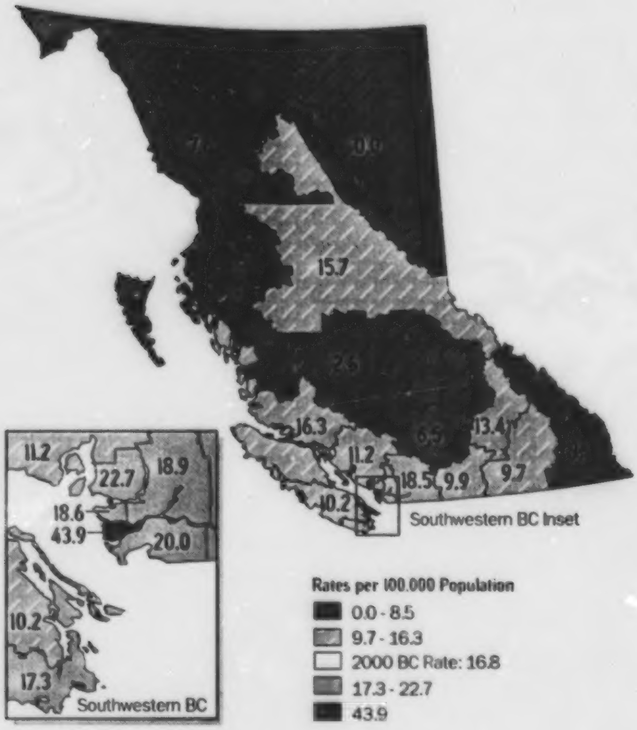
In August and September, an outbreak of 52 cases of *Salmonella enteritidis* infection was identified in the Lower Mainland. An investigation by Richmond Health Services, surrounding health regions, and the BC Centre for Disease Control, determined that the source was contaminated baked goods produced at a bakery in Richmond. Eggs used at the bakery were traced to a BC producer. The Canadian Food Inspection Agency subsequently determined that *Salmonella enteritidis* was cultured from environmental samples taken from the egg producer. Further eggs from the producer were diverted to pasteurization.

Salmonellosis Rates by Year, 1988-2000



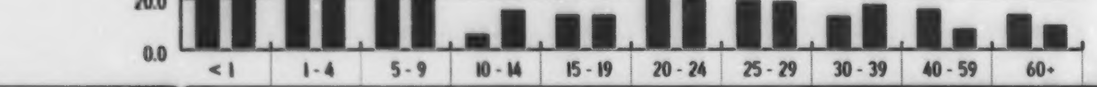
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Salmonellosis Cases	1376	1021	993	1173	939	992	844	862	820	645	652	[illegible]	[illegible]
BC Salmonellosis Rate	44.2	31.9	30.2	34.8	27.1	27.8	22.9	22.8	21.1	16.3	16.3	17.1	16.8
Can. Salmonellosis Rate	43.4	39.1	32.3	32.3	24.6	24.3	22.1	21.8	22.2	20.1	23.3	18.4	

Salmonellosis Rates by Health Region, 2000


7.6
0.0
15.7
2.6
16.3
6.5
13.4
8.5
11.2
18.5
9.9
9.7
10.2
Southwestern BC Inset
11.2
22.7
18.9
18.6
43.9
20.0
10.2
17.3
Southwestern BC
Rates per 100.000 Population
0.0 - 8.5
9.7 - 16.3
2000 BC Rate: 16.8
17.3 - 22.7
43.9

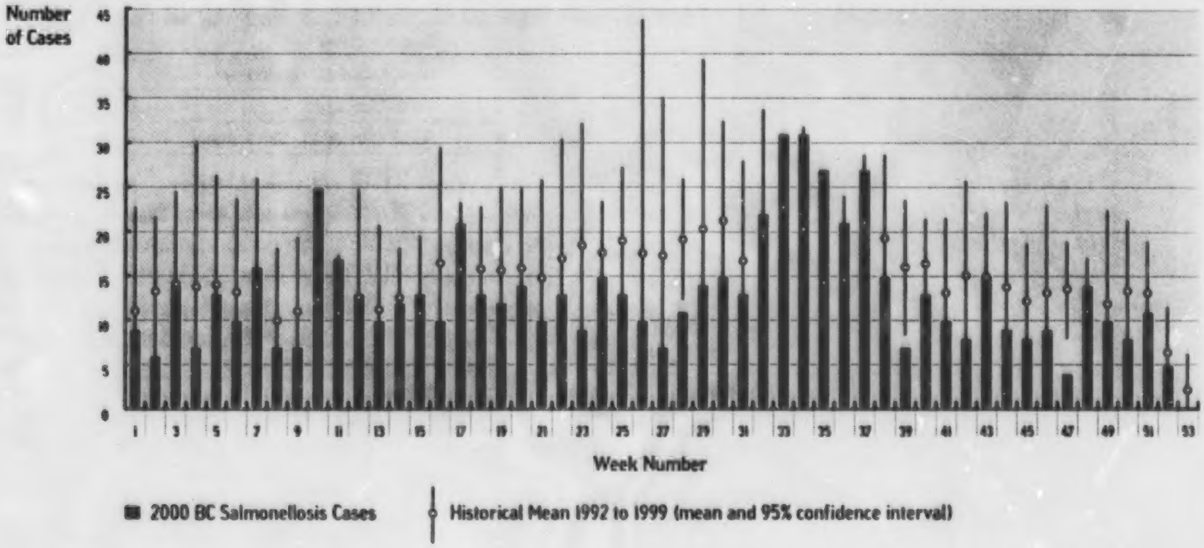
HR	Health Region	Cases	Rate
1	East Kootenay	7	8.5
2	West Kootenay - Boundary	8	9.7
3	North Okanagan	16	13.4
4	South Okanagan - Similkameen	23	9.9
5	Thompson	9	6.5
6	Fraser Valley	45	18.5
7	South Fraser Valley	115	20.0
8	Simon Fraser	98	18.9
9	Coast Garibaldi	9	11.2
10	Central Vancouver Island	25	10.2
11	Upper Island/Central Coast	20	16.3
12	Cariboo	2	2.6
13	North West	7	7.6
14	Peace Liard	0	0.0
15	Northern Interior	21	15.7
16	Vancouver	107	18.6
18	North Shore	41	22.7
19	Richmond	73	43.9
20	Capital	58	17.3

Salmonellosis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Salmonellosis Cases - Fe[illegible]	11	46	32	8	18	31	27	[illegible]	[illegible]	[illegible]	[illegible]
Salmonellosis Cases - Male	23	37	31	21	19	28	26	59	48	31	323
Salmonell[illegible]	54.3	52.0	26.2	6.3	13.7	23.4	19.7	[illegible]	[illegible]	[illegible]	[illegible]
Salmonellosis Rate - Male	107.7	39.7	24.0	15.6	13.7	20.6	18.9	17.8	8.3	9.8	16.0

2000 BC Salmonellosis Cases by Week Compared to Historical Numbers from 1992 to 1999 (Excluding Outbreak Cases in Weeks 20 and 21 of 1993)



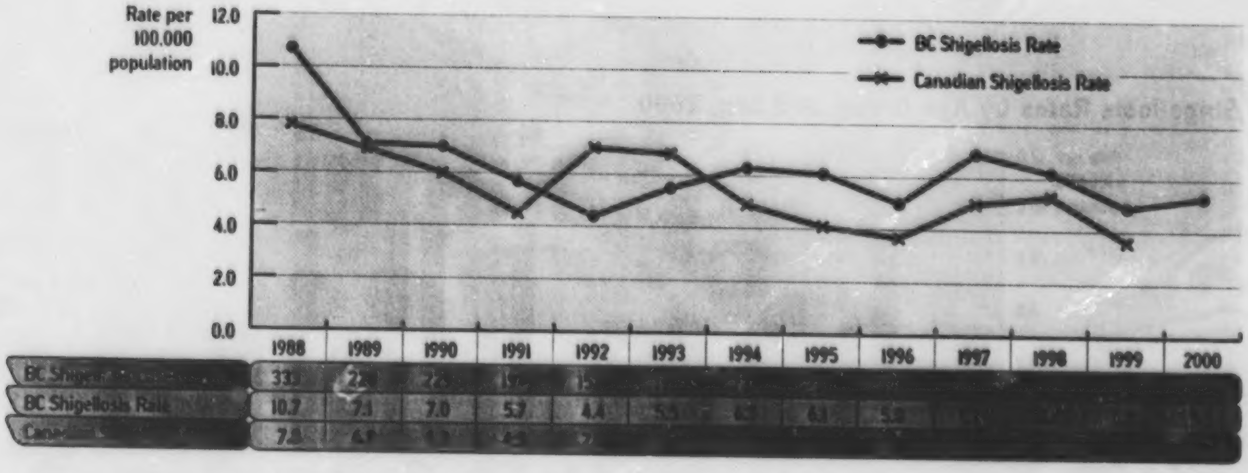
Shigellosis

There were 215 cases of infection with *Shigella* reported in BC during 2000 for a rate of 5.3 cases per 100,000 population. Vancouver had the highest regional rate at 12.7 cases per 100,000 population. Peaks in reporting occurred among children aged 1 through 4 and adults aged 20 through 29 years of age.

The majority of shigellosis cases are in travellers. Two clusters of *Shigella* infections not related to travel were identified in BC in 2000:

- In February 6 cases *Shigella flexneri*-2 infection occurred among patrons who consumed raw scallops at a food service establishment in Simon Fraser Health Region. The scallops were imported from Southeast Asia.
- In October and November a cluster of *Shigella sonnei* infections was identified among men who have sex with men (MSM) in the Lower Mainland. No common exposures except high risk sexual practices were found among cases.

Shigellosis Rates by Year, 1988-2000



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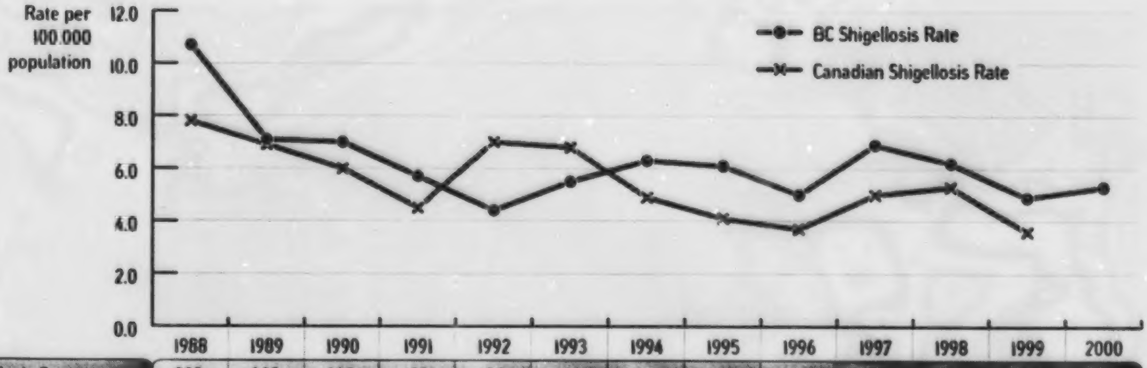
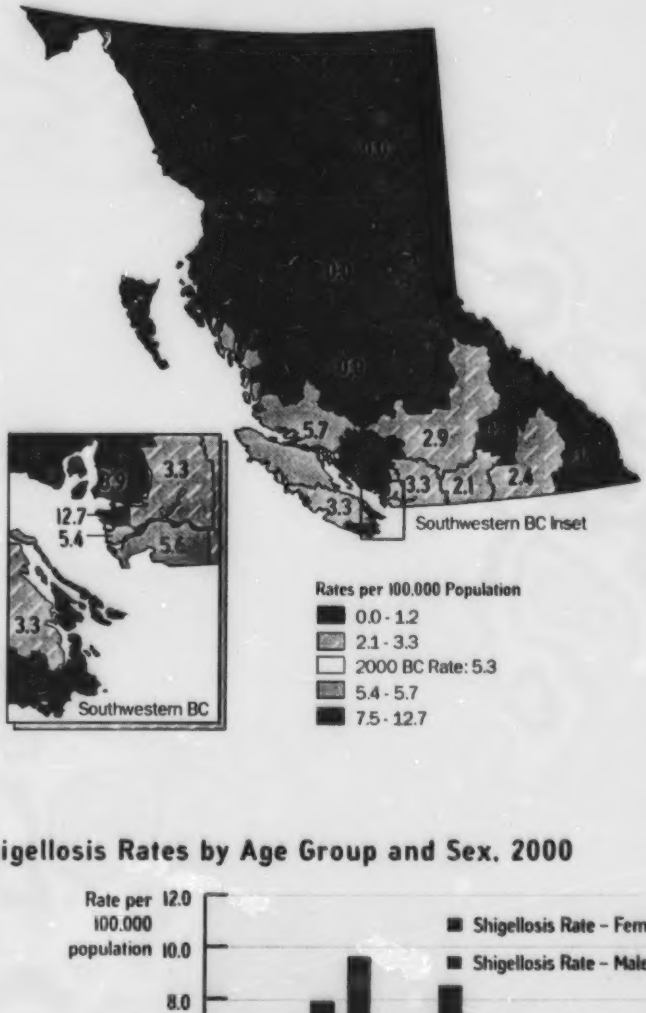
Shigellosis Rates by Year, 1988-2000



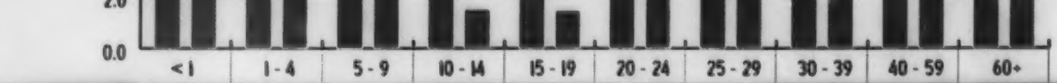
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Shigellosis Cases	333	228	229	193	152	196	232	231	196	[illegible]	[illegible]	[illegible]	[illegible]
BC Shigellosis Rate	10.7	7.1	7.0	5.7	4.4	5.5	6.3	6.1	5.0	6.9	6.2	4.9	5.3
Canadian Shigellosis Rate	7.8	6.9	6.0	4.5	7.0	6.8	4.9	4.1	3.7	[illegible]	[illegible]	[illegible]	

Shigellosis Rates by Health Region, 2000


0.0
0.0
0.0
0.0
5.7
2.9
3.3
2.1
2.4
3.3
Southwestern BC Inset
8.9
3.3
12.7
5.4
5.6
3.3
Southwestern BC
Rates per 100,000 Population
0.0 - 1.2
2.1 - 3.3
2000 BC Rate: 5.3
5.4 - 5.7
7.5 - 12.7

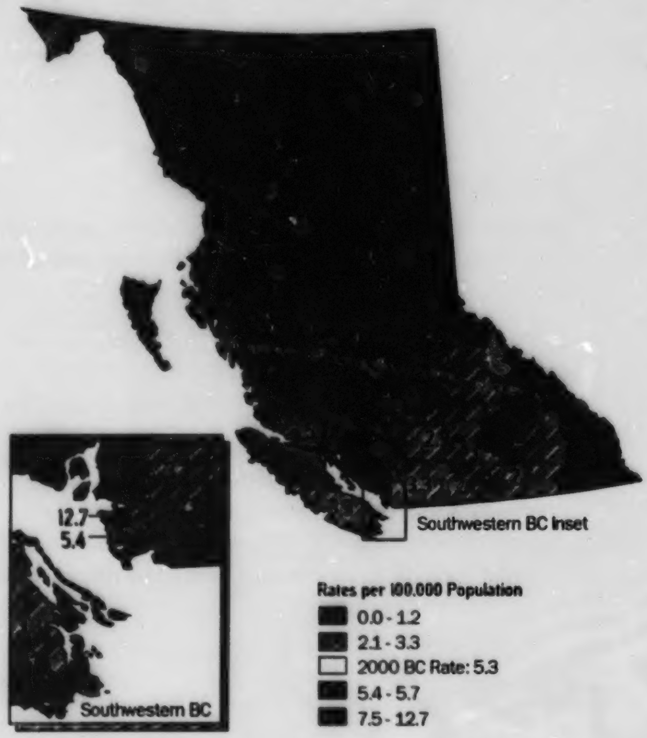
HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	2	2.4
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	5	2.1
5	Thompson	4	2.9
6	Fraser Valley	8	3.3
7	South Fraser Valley	32	5.6
8	Simon Fraser	17	3.3
9	Coast Garibaldi	7	8.7
10	Central Vancouver Island	8	3.3
11	Upper Island/Central Coast	7	5.7
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	73	12.7
18	North Shore	16	8.9
19	Richmond	9	5.4
20	Capital	25	7.5

Shigellosis Rates by Age Group and Sex, 2000



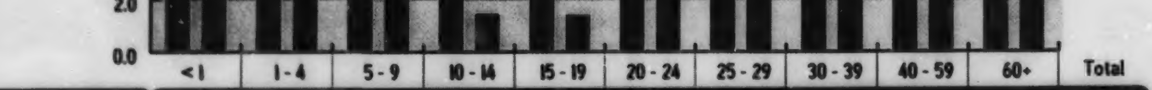
	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Shigellosis Cases - Female	1	7	8	4	4	12	14	[illegible]	[illegible]	[illegible]	[illegible]
Shigellosis Cases - Male	1	9	11	2	2	7	13	29	27	11	112
Shigellosis Cases - Unknown	0	0	0	0	0	0	0	0	1	0	[illegible]
Shigellosis Rate - Female	4.9	7.9	6.5	3.1	3.0	9.1	10.2	[illegible]	[illegible]	[illegible]	[illegible]
Shigellosis Rate - Male	4.7	9.6	8.5	1.5	1.4	5.1	9.4	8.7	4.7	3.5	5.5

Shigellosis Rates by Health Region, 2000


12.7
5.4
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0 - 1.2
2.1 - 3.3
2000 BC Rate: 5.3
5.4 - 5.7
7.5 - 12.7

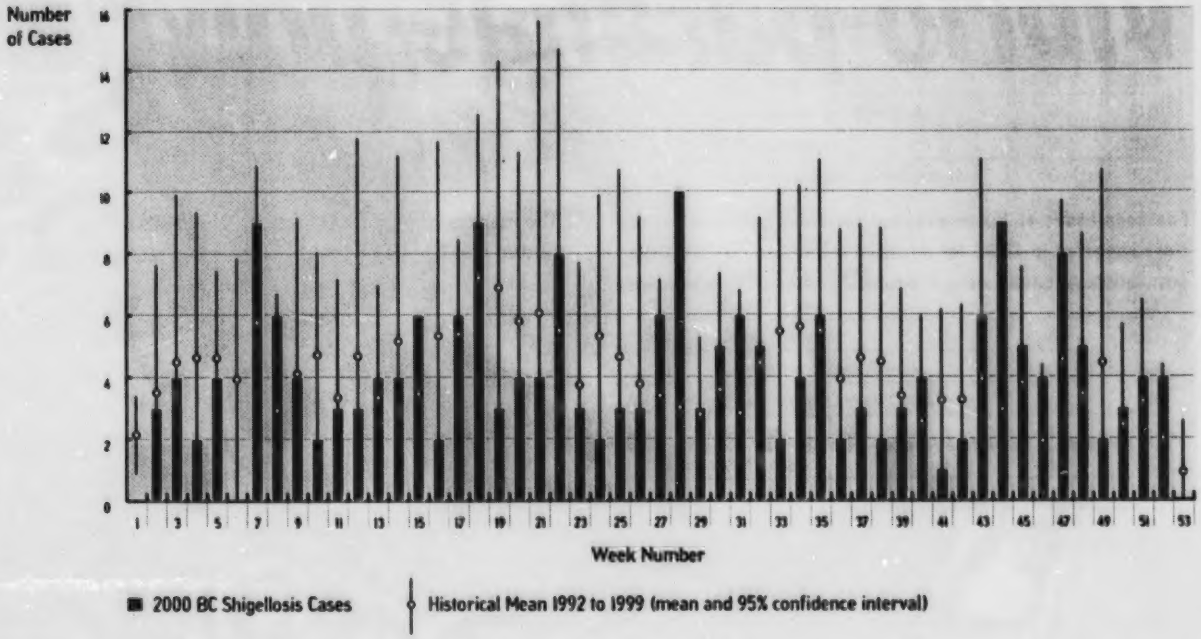
HR	Health Region	Cases	Rate
1	East Kootenay	1	1.2
2	West Kootenay - Boundary	2	2.4
3	North Okanagan	1	0.8
4	South Okanagan - Similkameen	5	2.1
5	Thompson	4	2.9
6	Fraser Valley	8	3.3
7	South Fraser Valley	32	5.6
8	Simon Fraser	17	3.3
9	Coast Garibaldi	7	8.7
10	Central Vancouver Island	8	3.3
11	Upper Island/Central Coast	7	5.7
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	73	12.7
18	North Shore	16	8.9
19	Richmond	9	5.4
20	Capital	25	7.5

Shigellosis Rates by Age Group and Sex, 2000



	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shigellosis Cases - Male	1	9	11	2	2	7	13	[illegible]	[illegible]	[illegible]	[illegible]
Shigellosis Cases - Unknown	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shigellosis Rate - Female	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Shigellosis Rate - Male	4.7	9.6	8.5	[illegible]	1.4	5.1	9.4	[illegible]	[illegible]	[illegible]	[illegible]

2000 BC Shigellosis Cases by Week Compared to Historical Numbers from 1992 to 1999



Trichinosis

No cases were reported in 2000.

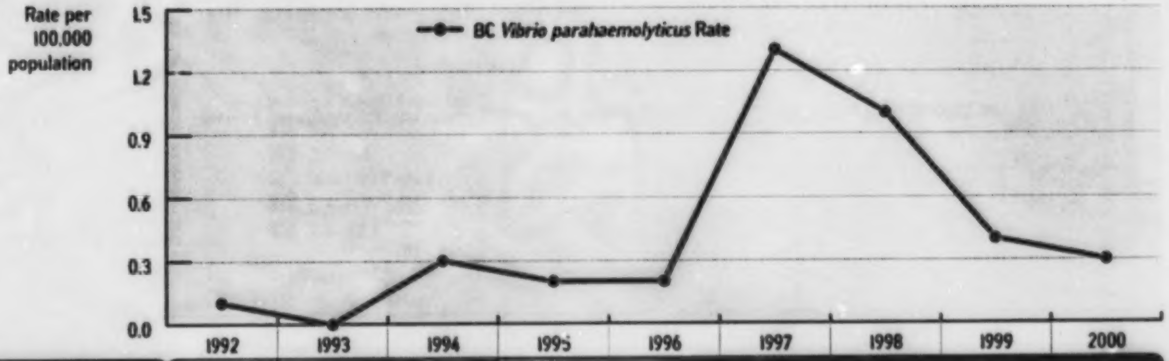
Typhoid Fever

Ten cases were reported in 2000.

Vibrio parahaemolyticus

Fourteen cases of *Vibrio parahaemolyticus* gastroenteritis were reported in 2000 for a rate of 0.3 cases per 100,000 population. All cases were in adults 25 years of age and older. The majority of cases were among individuals consuming raw bivalve shellfish which they had harvested recreationally.

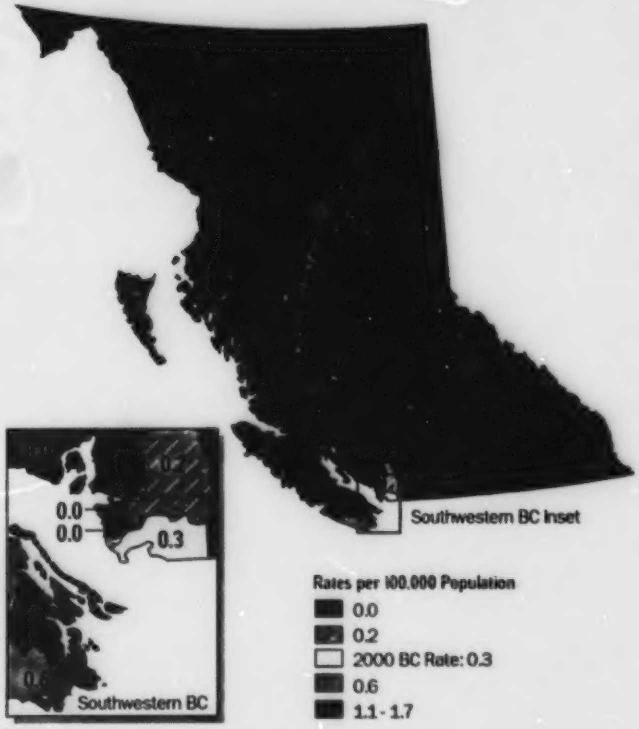
Vibrio parahaemolyticus Rates by Year, 1992-2000



	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC *Vibrio* [illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC *Vibrio parahaemolyticus* Rate	0.1	0.0	0.3	0.2	0.2	1.3	1.0	0.4	[illegible]

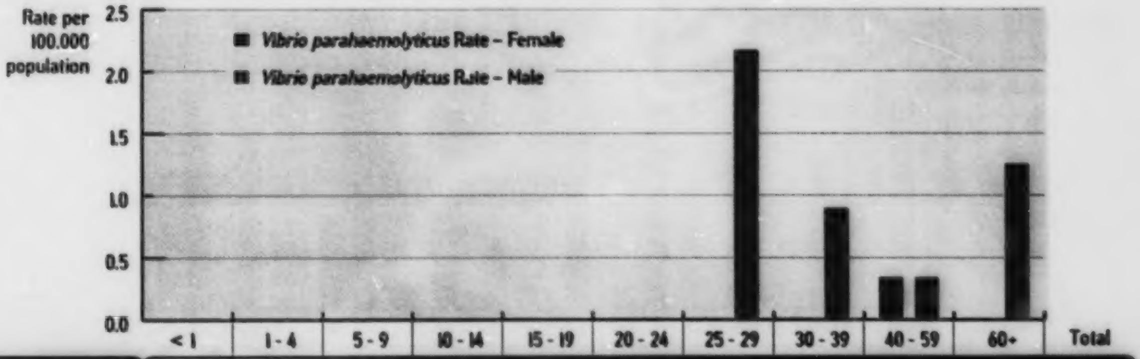
Not Nationally Notifiable

Vibrio parahaemolyticus Rates by Health Region, 2000


0.2
0.0
0.0
0.3
0.6
Southwestern BC
Southwestern BC Inset
Rates per 100.000 Population
0.0
0.2
2000 BC Rate: 0.3
0.6
1.1 - 1.7

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	2	1.7
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	2	0.3
8	Simon Fraser	1	0.2
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	3	1.2
11	Upper Island/Central Coast	2	1.6
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	0	0.0
18	North Shore	2	1.1
19	Richmond	0	0.0
20	Capital	2	0.6

Vibrio parahaemolyticus Rates by Age Group and Sex, 2000

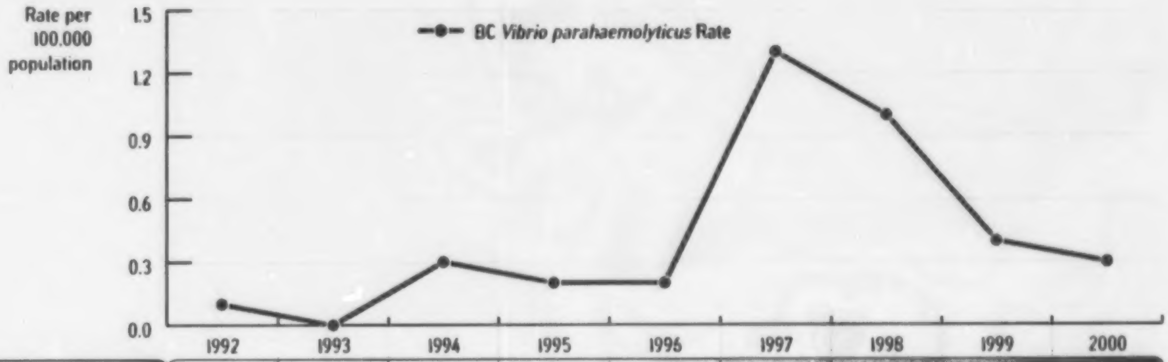


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Vibrio para[illegible]	0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Vibrio parahaemolyticus Cases - Male	0	0	0	0	0	0	3	3	2	[illegible]	[illegible]
Vibrio para[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Vibrio parahaemolyticus Rate - Fe[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Vibrio parahaemolyticus

Fourteen cases of *Vibrio parahaemolyticus* gastroenteritis were reported in 2000 for a rate of 0.3 cases per 100,000 population. All cases were in adults 25 years of age and older. The majority of cases were among individuals consuming raw bivalve shellfish which they had harvested recreationally.

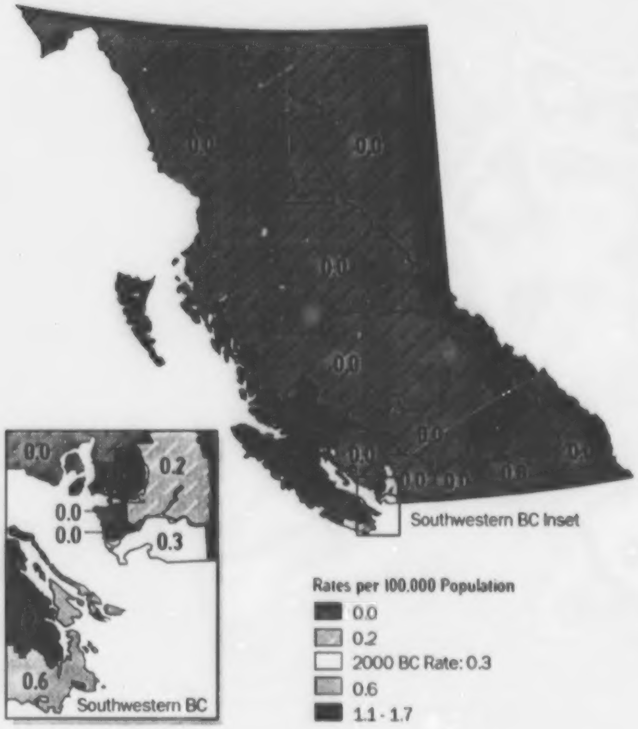
Vibrio parahaemolyticus Rates by Year, 1992-2000



	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC *Vibrio parahaemolyticus* Cases	4	0	12	7	7	53	39	17	[illegible]
BC *Vibrio parahaemolyticus* Rate	0.1	0.0	0.3	0.2	0.2	1.3	1.0	0.4	0.3

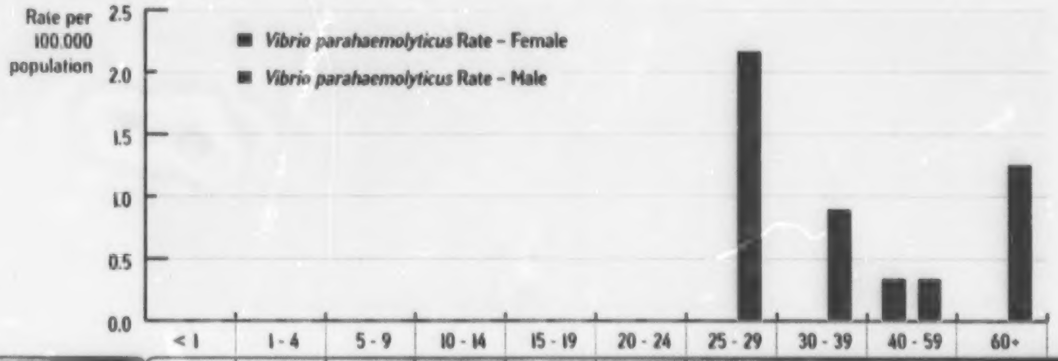
Not Nationally Notifiable

Vibrio parahaemolyticus Rates by Health Region, 2000


0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.0
0.2
0.0
0.0
0.3
0.6
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
0.0
0.2
2000 BC Rate: 0.3
0.6
1.1 - 1.7

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	0	0.0
3	North Okanagan	2	1.7
4	South Okanagan - Similkameen	0	0.0
5	Thompson	0	0.0
6	Fraser Valley	0	0.0
7	South Fraser Valley	2	0.3
8	Simon Fraser	1	0.2
9	Coast Garibaldi	0	0.0
10	Central Vancouver Island	3	1.2
11	Upper Island/Central Coast	2	1.6
12	Cariboo	0	0.0
13	North West	0	0.0
14	Peace Liard	0	0.0
15	Northern Interior	0	0.0
16	Vancouver	0	0.0
18	North Shore	2	1.1
19	Richmond	0	0.0
20	Capital	2	0.6

Vibrio parahaemolyticus Rates by Age Group and Sex, 2000

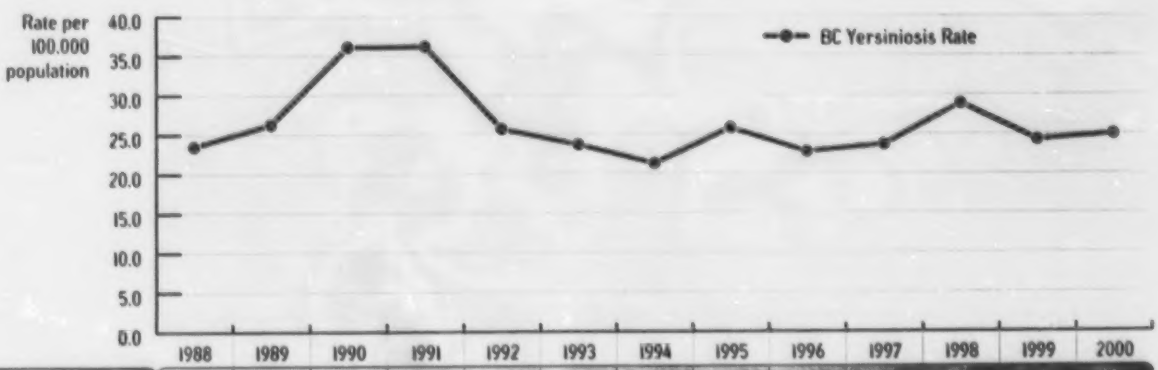


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Vibrio parahaemolyticus Cases – [illegible]	0	0	0	0	0	0	0	[illegible]	[illegible]	[illegible]	[illegible]
Vibrio parahaemolyticus Cases – Male	0	0	0	0	0	0	3	3	2	4	12
Vibrio parahaemolyticus Rate – [illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]
Vibrio parahaemolyticus Rate – Male	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.9	0.3	1.3	0.6

Yersiniosis

There were 1018 cases of infection with *Yersinia* reported during 2000 for a rate of 25.0 cases per 100,000 population. *Yersinia enterocolitica* accounts for the majority of cases reported. North Shore had the highest regional rate at 80.4 cases per 100,000 population followed by Vancouver and Richmond with rates of 48.1 and 53.0 cases per 100,000 population respectively. These regions (North Shore, Richmond and Vancouver) are served primarily by an outpatient lab which performs cold enrichment on stool specimens. The highest reporting rate was seen among children 1 to 4 years of age.

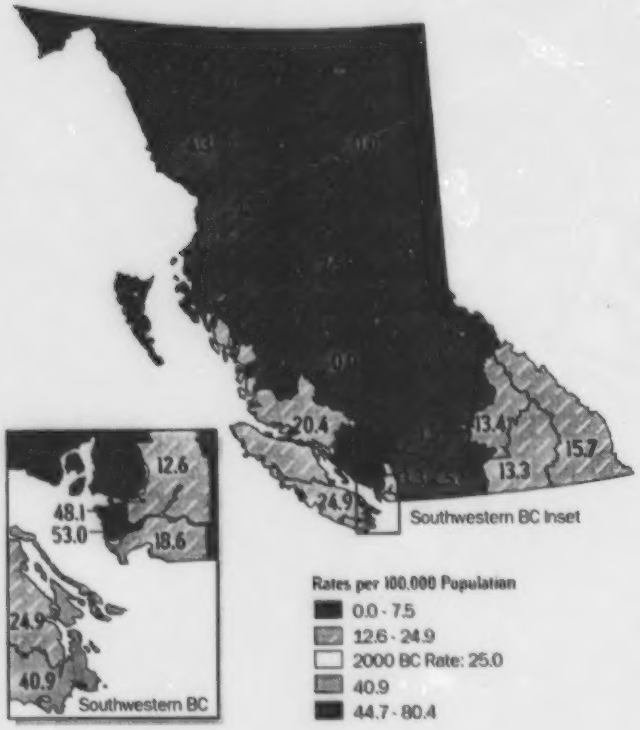
Yersiniosis Rates by Year, 1988-2000



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Yersiniosis Cases	732	841	1189	1220	893	845	786	976	884	940	115	976	101
BC Yersiniosis Rate	23.5	26.3	36.1	36.2	25.7	23.7	21.3	25.8	22.8	23.7	28.9	24.3	25.0

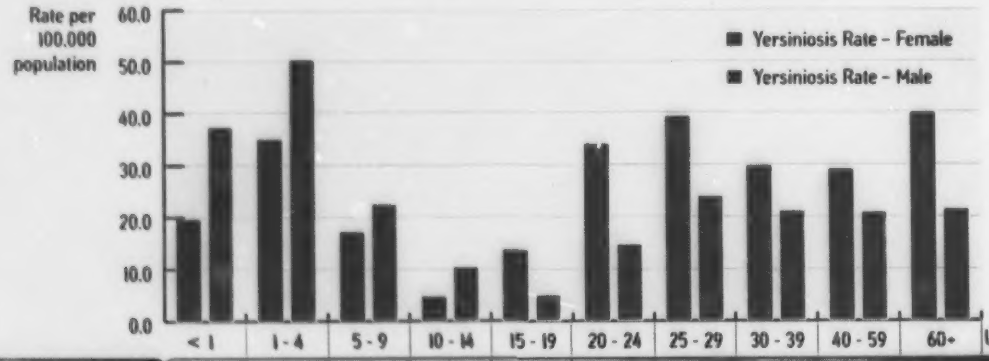
Not Nationally Notifiable

Yersiniosis Rates by Health Region, 2000


20.4
13.4
15.7
13.3
24.9
Southwestern BC Inset
12.6
48.1
53.0
18.6
24.9
40.9
Southwestern BC
Rates per 100,000 Population
0.0 - 7.5
12.6 - 24.9
2000 BC Rate: 25.0
40.9
44.7 - 80.4

HR	Health Region	Cases	Rate
1	East Kootenay	13	15.7
2	West Kootenay - Boundary	11	13.3
3	North Okanagan	16	13.4
4	South Okanagan - Similkameen	13	5.6
5	Thompson	2	1.5
6	Fraser Valley	8	3.3
7	South Fraser Valley	107	18.6
8	Simon Fraser	65	12.6
9	Coast Garibaldi	36	44.7
10	Central Vancouver Island	61	24.9
11	Upper Island/Central Coast	25	20.4
12	Cariboo	0	0.0
13	North West	4	4.3
14	Peace Liard	0	0.0
15	Northern Interior	10	7.5
16	Vancouver	277	48.1
18	North Shore	145	80.4
19	Richmond	88	53.0
20	Capital	137	40.9

Yersiniosis Rates by Age Group and Sex, 2000

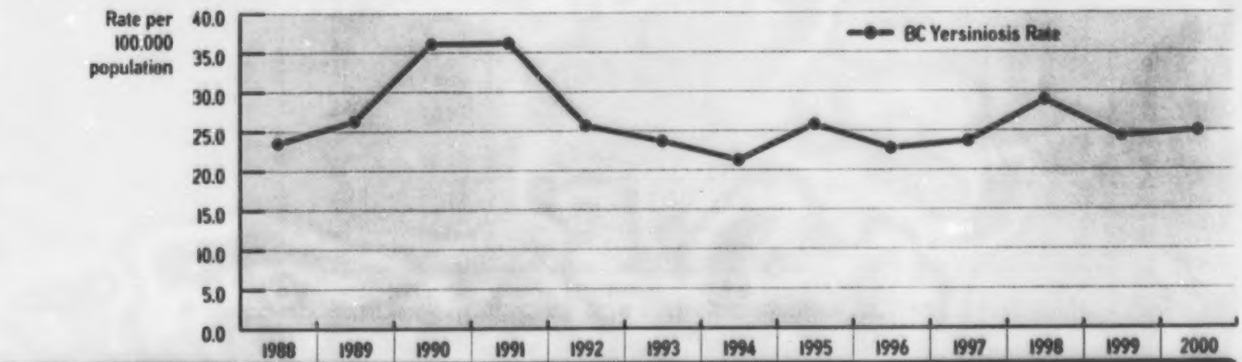


	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Yersiniosis Cases - Female	4	31	21	6	18	45	54	98	169	[illegible]	[illegible]	[illegible]
Yersiniosis Cases - Male	8	47	29	14	7	20	33	70	121	68	0	417
Yersiniosis Cases - Unknown	0	0	0	0	0	1	0	0	1	[illegible]	[illegible]	[illegible]
Yersiniosis Rate - Female	19.8	35.1	17.2	4.7	13.7	34.1	39.3	29.8	29.1	[illegible]	[illegible]	[illegible]
Yersiniosis Rate - Male	37.4	50.4	22.5	10.4	5.0	14.7	23.9	21.1	20.9	21.4		20.7

Yersiniosis

There were 1018 cases of infection with *Yersinia* reported during 2000 for a rate of 25.0 cases per 100,000 population. *Yersinia enterocolitica* accounts for the majority of cases reported. North Shore had the highest regional rate at 80.4 cases per 100,000 population followed by Vancouver and Richmond with rates of 48.1 and 53.0 cases per 100,000 population respectively. These regions (North Shore, Richmond and Vancouver) are served primarily by an outpatient lab which performs cold enrichment on stool specimens. The highest reporting rate was seen among children 1 to 4 years of age.

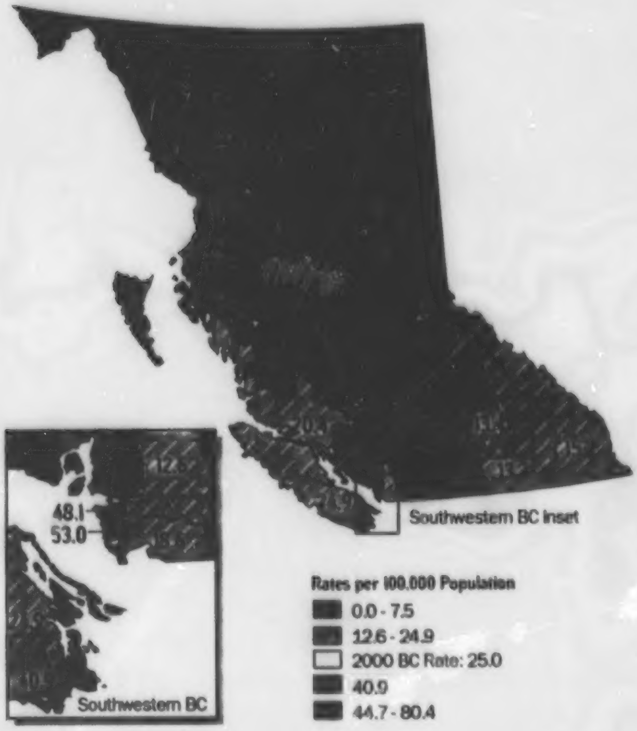
Yersiniosis Rates by Year, 1988-2000



	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Yersiniosis [illegible]	732	841	1189	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Yersiniosis Rate	23.5	26.3	36.1	36.2	25.7	23.7	21.3	25.8	22.8	23.7	[illegible]	[illegible]	[illegible]

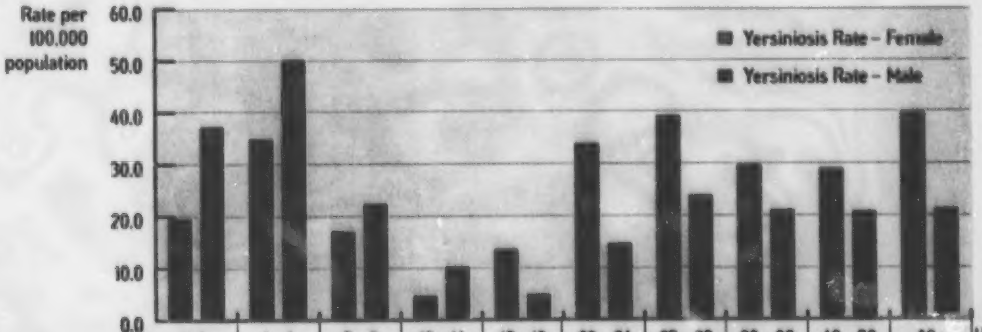
Not Nationally Notifiable

Yersiniosis Rates by Health Region, 2000


48.1
53.0
Southwestern BC Inset
Southwestern BC
Rates per 100,000 Population
0.0 - 7.5
12.6 - 24.9
2000 BC Rate: 25.0
40.9
44.7 - 80.4

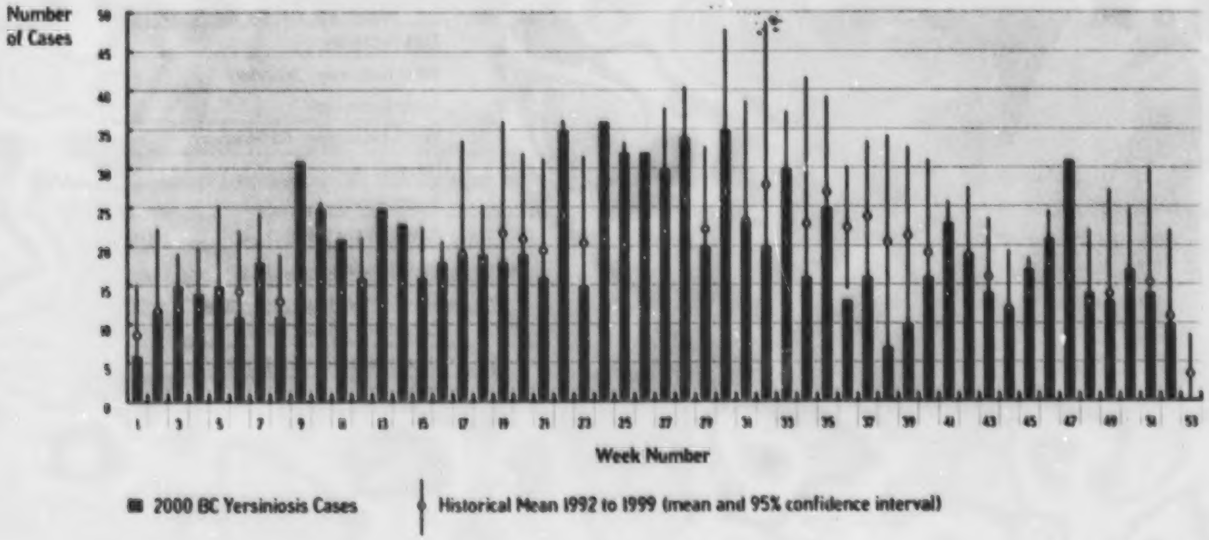
HR	Health Region	Cases	Rate
1	East Kootenay	13	15.7
2	West Kootenay - Boundary	11	13.3
3	North Okanagan	16	13.4
4	South Okanagan - Similkameen	13	5.6
5	Thompson	2	1.5
6	Fraser Valley	8	3.3
7	South Fraser Valley	107	18.6
8	Simon Fraser	65	12.6
9	Coast Garibaldi	36	44.7
10	Central Vancouver Island	61	24.9
11	Upper Island/Central Coast	25	20.4
12	Cariboo	0	0.0
13	North West	4	4.3
14	Peace Liard	0	0.0
15	Northern Interior	10	7.5
16	Vancouver	277	48.1
18	North Shore	145	80.4
19	Richmond	88	53.0
20	Capital	137	40.9

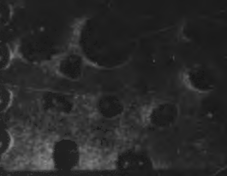
Yersiniosis Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Unknown	Total
Yersiniosis [illegible]	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Yersiniosis Cases - Male	8	47	29	14	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Yersinio[illegible]	0	0	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Yers[illegible]	19.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Yersini[illegible]	37.4	50.4	[illegible]	[illegible]	5.8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

2000 BC Yersiniosis Cases by Week Compared to Historical Numbers from 1992 to 1999 (Excluding Outbreak Cases in Weeks 47 and 48 of 1998)





4

Vectorborne and Other Zoonotic Diseases

Hantavirus Pulmonary Syndrome

No cases were reported in 2000.

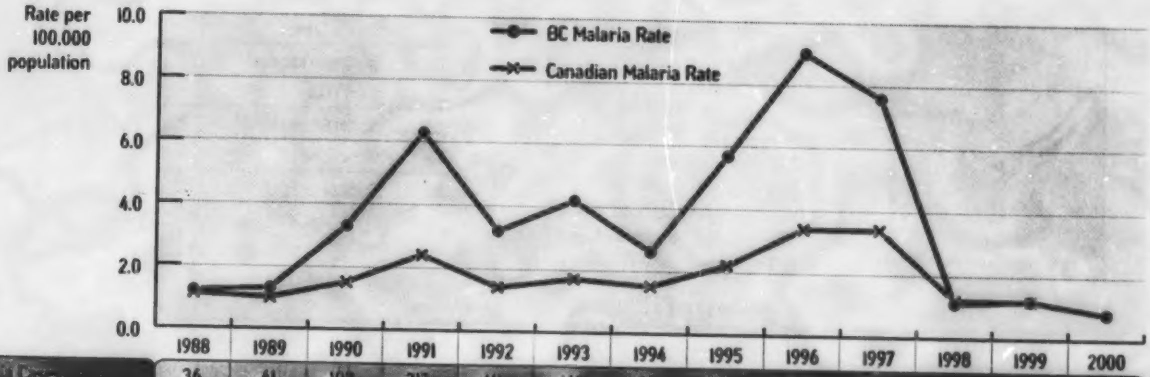
Lyme Disease

Twelve cases were reported in 2000. Six of the twelve had exposures to Lyme endemic areas outside of BC. Exposure histories are not available for the other 6 cases.

Malaria

Malaria reporting has remained low for the past 3 years following a peak in the years 1995 through 1997. In 2000, thirty-three cases were reported for a rate of 0.8 cases per 100,000 population. All but 2 cases were in adults 20 years of age and older.

Malaria Rates by Year, 1988-2000

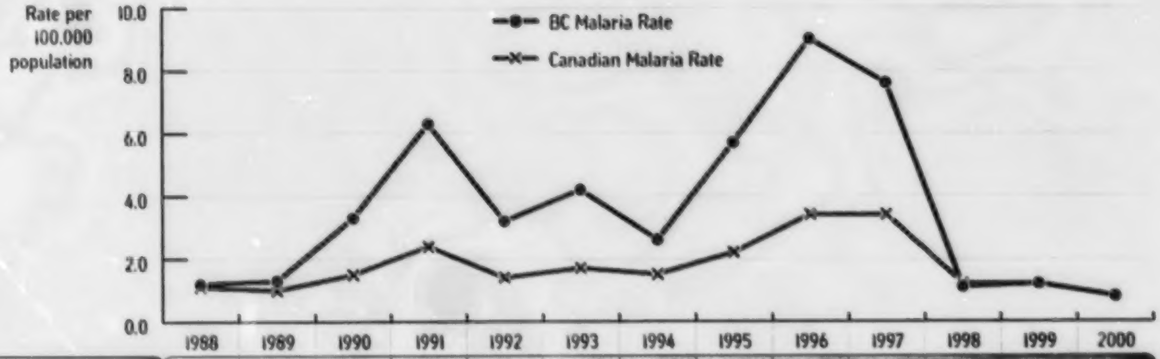


	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Malaria Cases	36	41	108	213	111	149	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BC Malaria Rate	1.2	1.3	3.3	6.3	3.2	4.2	2.6	5.7	9.0	7.6	1.1	1.2	0.8
Canadian Malaria Rate	1.1	1.0	1.5	2.4	1.4	1.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Malaria

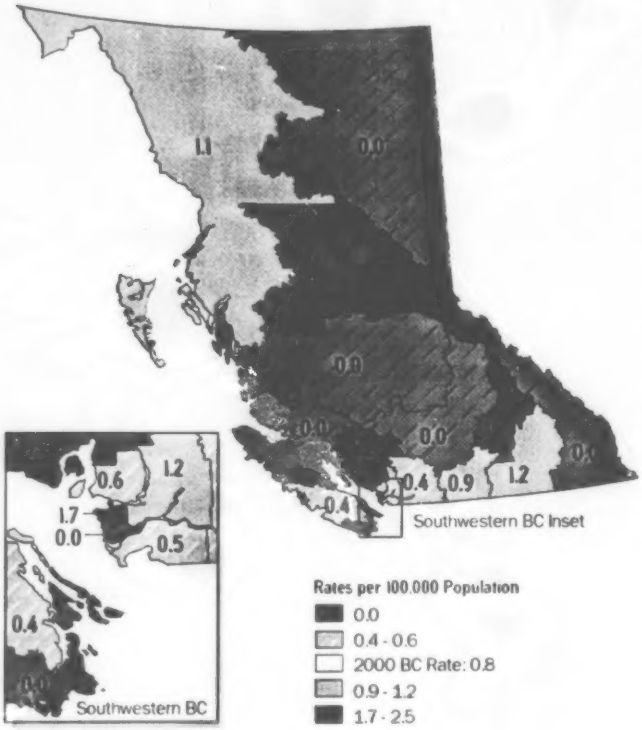
Malaria reporting has remained low for the past 3 years following a peak in the years 1995 through 1997. In 2000, thirty-three cases were reported for a rate of 0.8 cases per 100,000 population. All but 2 cases were in adults 20 years of age and older.

Malaria Rates by Year, 1988-2000



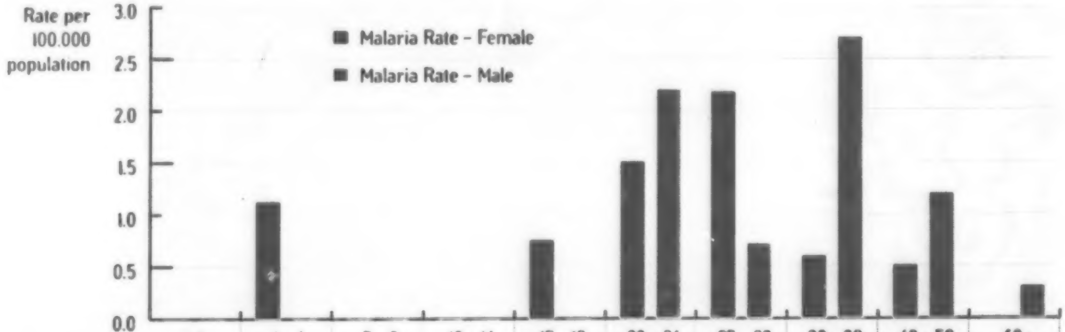
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
BC Malaria Cases	36	41	108	213	111	149	96	217	348	302	44	50	3
BC Malaria Rate	1.2	1.3	3.3	6.3	3.2	4.2	2.6	5.7	9.0	7.6	1.1	1.2	0.8
Canadian Malaria Rate	1.1	1.0	1.5	2.4	1.4	1.7	1.5	2.2	3.4	3.4	1.2	1.2	

Malaria Rates by Health Region, 2000


1.1
0.0
0.0
0.0
0.0
0.0
0.4
0.9
1.2
0.4
Southwestern BC Inset
0.6
1.2
1.7
0.0
0.5
0.4
0.0
Southwestern BC
Rates per 100,000 Population
0.0
0.4 - 0.6
2000 BC Rate: 0.8
0.9 - 1.2
1.7 - 2.5

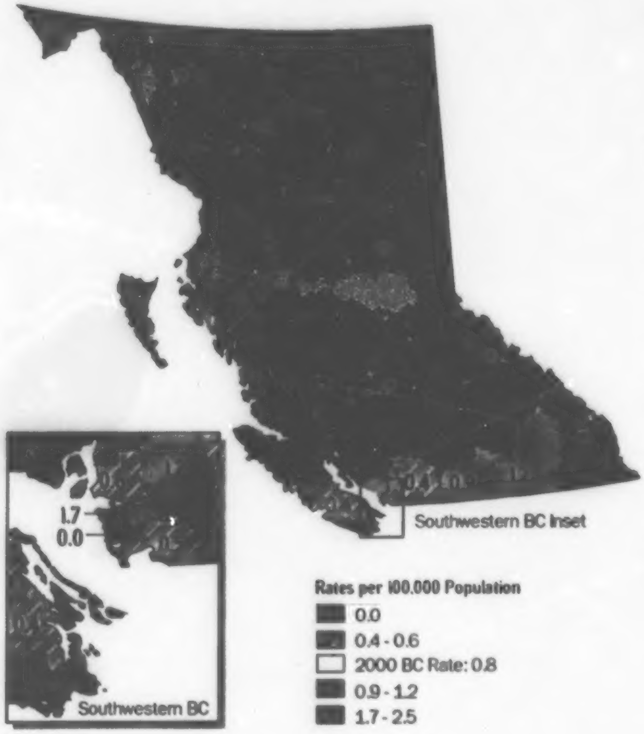
HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	2	1.7
4	South Okanagan - Similkameen	2	0.9
5	Thompson	0	0.0
6	Fraser Valley	1	0.4
7	South Fraser Valley	3	0.5
8	Simon Fraser	6	1.2
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	1	0.4
11	Upper Island/Central Coast	0	0.0
12	Cariboo	0	0.0
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	3	2.2
16	Vancouver	10	1.7
18	North Shore	3	1.7
19	Richmond	0	0.0
20	Capital	0	0.0

Malaria Rates by Age Group and Sex, 2000



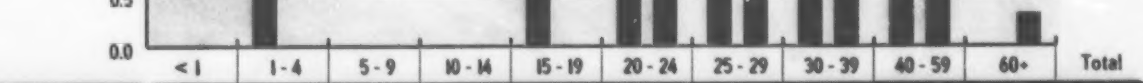
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Malaria Cases - Female	0	1	0	0	1	2	3	2	[illegible]	[illegible]	[illegible]
Malaria Cases - Male	0	0	0	0	0	3	1	9	7	1	21
Malaria Rate - Female	0.0	1.1	0.0	0.0	0.8	1.5	2.2	0.6	[illegible]	[illegible]	[illegible]
Malaria Rate - Male	0.0	0.0	0.0	0.0	0.0	2.2	0.7	2.7	1.2	0.3	1.0

Malaria Rates by Health Region, 2000


1.7
0.0
Southwestern BC
Southwestern BC Inset
Rates per 100,000 Population
▨ 0.0
▨ 0.4 - 0.6
☐ 2000 BC Rate: 0.8
▨ 0.9 - 1.2
▨ 1.7 - 2.5

HR	Health Region	Cases	Rate
1	East Kootenay	0	0.0
2	West Kootenay - Boundary	1	1.2
3	North Okanagan	2	1.7
4	South Okanagan - Similkameen	2	0.9
5	Thompson	0	0.0
6	Fraser Valley	1	0.4
7	South Fraser Valley	3	0.5
8	Simon Fraser	6	1.2
9	Coast Garibaldi	2	2.5
10	Central Vancouver Island	1	0.4
11	Upper Island/Central Coast	0	0.0
12	Cariboo	0	0.0
13	North West	1	1.1
14	Peace Liard	0	0.0
15	Northern Interior	3	2.2
16	Vancouver	10	1.7
18	North Shore	3	1.7
19	Richmond	0	0.0
20	Capital	0	0.0

Malaria Rates by Age Group and Sex, 2000



	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 39	40 - 59	60+	Total
Malaria Cas[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Malaria Cases - Mal[illegible]	0	0	0	0	0	3	1	[illegible]	[illegible]	[illegible]	[illegible]
Malaria Ra[illegible]	0.0	1.1	0.0	0[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Malaria Rat[illegible] Male	0.0	0.0	0.0	0.0	0.0	2.2	0.7	[illegible]	[illegible]	[illegible]	[illegible]

Reportable Communicable Diseases in BC

Reflecting ammendments to the CD Regulations made by order in Council on March 2001

SCHEDULE A: (reportable by all sources including laboratories)

- Anthrax
- Acquired Immune Deficiency Syndrome
- Botulism
- Brucellosis
- Cholera
- Congenital Infections:
  - Toxoplasmosis, Rubella, Cytomegalovirus, Herpes Simplex, Varicella-Zoster, Hepatitis B Virus, Listeriosis and any other congenital infection
- Cryptosporidiosis
- Cyclospora infection
- Diffuse Lamellar Keratitis
- Diphtheria:
  - Cases
  - Carriers
- Encephalitis:
  - Post-infectious
  - Subacute sclerosing panencephalitis
  - Vaccine-related
  - Viral
- Foodborne illness:
  - All causes
- Gastroenteritis epidemic:
  - Bacterial
  - Parasitic
  - Viral
- Genital Chlamydia Infection
- Giardiasis
- *Haemophilus Influenzae* Disease:
  - All Invasive, by Type
- Hantavirus Pulmonary Syndrome
- Hemorrhagic Viral Fevers
- Hemolytic Uremic Syndrome (HUS)
- Hepatitis Viral:
  - Hepatitis A
  - Hepatitis B
  - Hepatitis C
  - Hepatitis E
  - Other Viral Hepatitis
- Invasive Group A Streptococcal Disease
- Invasive *Streptococcus Pneumoniae* Infection
- Leprosy
- Lyme Disease
- Measles
- Meningitis: All causes
  - (i) Bacterial: Hemophilus
    - Pneumococcal
    - Other
  - (ii) Viral
- Meningococcal Disease:
  - All Invasive
  - Including Primary Meningococcal Pneumonia and Primary Meningococcal Conjunctivitis
- Mumps
- Neonatal Group B Streptococcal Infection
- Pertussis (Whooping Cough)
- Plague
- Poliomyelitis
- Rabies
- Reye Syndrome
- Rubella
- Tetanus
- Transfusion Transmitted Infection
- Tuberculosis
- Typhoid Fever and Paratyphoid Fever
- Venereal Disease:
  - Chancroid
  - Gonorrhea - all sites
  - Syphilis
- Waterborne Illness:
  - All causes
- Yellow Fever

SCHEDULE B: (reportable by laboratories only)

- All specific bacterial and viral stool pathogens:
  - (i) Bacterial:
    - *Campylobacter*
    - *Salmonella*
    - *Shigella*
    - *Yersinia*
  - (ii) Viral
- Amoebiasis
- *Borrelia burgdorferi* infection
- Cerebrospinal Fluid Micro-organisms
- Chlamydial Diseases, including Psittacosis
- Herpes Genitalis
- Influenza
- Legionellosis
- Leptospirosis
- Malaria
- Methicillin-Resistant *Staphylococcus aureus* (MRSA)
- Q Fever
- Rickettsial Diseases
- Vancomycin-Resistant Enterococci (VRE)

2000 B.C. Selected Diseases Case Reports by Health Authorities

	B.C. Total	East Kootenay	West Kootenay-Boundary	North Okanagan	South Okanagan Similkameen	Thompson	Fraser Valley	South Fraser Valley
2000 Population	4,067,179	82,552	82,758	119,250	233,133	137,639	243,175	575,919
AIDS	85	0	0	1	2	0	1	6
Ameblasis	287	0	9	0	0	8	14	47
Campylobacteriosis	2553	28	32	37	88	48	128	390
Chlamydia	6193	61	81	138	369	293	172	517
Cryptosporidiosis	167	1	1	1	4	23	20	30
Cyclosporidiosis	7	0	0	0	0	0	1	2
Verotoxigenic *E. coli*	163	4	3	8	21	6	9	21
Giardiasis	926	18	20	18	35	27	62	114
Gonorrhea	724	0	1	5	19	12	11	56
***Haemophilus influenza* type b (invasive)**	7	0	1	0	0	0	0	2
Hepatitis A	136	12	4	0	4	2	0	11
Hepatitis B: Acute	112	5	0	1	3	4	3	12
Hepatitis B: Undetermined	1726	1	5	0	2	0	9	37
Hepatitis B: Chronic	1015	2	5	1	4	15	47	[illegible]
Hepatitis C	4302	67	93	120	197	176	349	461
Hepatitis E	6	0	0	0	0	0	0	2
HIV	413	1	1	5	13	6	22	19
Influenza	218	6	9	1	10	9	19	23
Malaria	33	0	1	2	2	0	1	3
Measles	42	0	0	0	0	0	0	2
Meningococcal (Invasive)	24	0	0	1	1	1	3	3
Methicillin Resistant *Staphylococcus aureus*	1041	2	9	26	20	12	52	160
Mumps	17	0	1	0	0	0	1	8
Pertussis	1806	39	99	22	227	157	20	212
Pneumococcal (Invasive)	93	1	0	7	0	13	1	6
Rubella	2	0	0	0	0	0	0	1
Salmonellosis	684	7	8	16	23	9	45	115
Shigellosis	215	1	2	1	5	4	8	32
Streptococcal Group A	57	1	1	2	0	4	5	14
Syphilis	96	0	0	0	2	1	1	7
Tuberculosis	290	1	1	1	5	2	14	50
Vancomycin Resistant Enterococci	46	0	0	1	2	0	1	0
Vibrio parahaemolyticus	14	0	0	2	0	0	0	2
Yersiniosis	1018	13	11	16	13	2	8	107
Less Common Diseases								
Botulism	1	0	0	0	0	0	0	0
Hantavirus	0	0	0	0	0	0	0	0
Leprosy	1	0	0	0	0	0	0	1
Listeriosis	[illegible]	[illegible]	1	0	0	0	0	0
Lyme Disease	12	1	0	0	1	0	1	1
Trichinosis	0	[illegible]	0	0	[illegible]	0	[illegible]	[illegible]
Typhoid	10	0	0	1	2	0	1	2

BC Centre for Disease Control

Simon Fraser	Coast Garibaldi	Central Island	Upper Island	Cariboo	North West	Peace Liard	North Interior	Vancouver	[illegible]	[illegible]	[illegible]
517,594	80,448	245,279	122,809	77,188	91,959	66,254	134,081	575,744	166,118	180,432	334,847
5	2	2	1	0	1	0	0	39	2	3	7
23	1	0	1	0	0	0	0	154	[illegible]	[illegible]	21
341	47	157	74	0	26	1	33	503	180	155	285
537	129	387	236	104	197	106	423	1639	[illegible]	[illegible]	[illegible]
15	2	6	3	0	1	0	1	38	5	9	7
0	0	0	0	0	0	0	0	0	0	0	[illegible]
25	4	4	6	0	4	0	9	16	2	4	17
98	24	41	38	11	26	0	21	241	[illegible]	41	[illegible]
83	10	14	11	1	12	2	2	428	6	26	16
0	0	0	0	1	1	0	0	0	2	0	0
18	11	3	1	26	2	0	1	17	10	2	12
14	3	5	10	1	3	0	2	30	0	[illegible]	[illegible]
38	5	3	0	0	6	0	0	1118	390	71	41
533	10	18	6	4	12	3	68	0	[illegible]	23	32
555	63	274	139	24	67	45	129	1022	82	95	344
2	0	0	0	0	0	0	0	1	0	0	[illegible]
45	2	13	3	2	1	2	3	242	0	6	27
45	8	4	3	5	3	1	5	22	11	3	31
6	2	1	0	0	1	0	3	10	0	1	0
0	0	0	0	0	0	38	0	2	[illegible]	0	0
2	1	1	0	1	1	1	0	3	3	0	2
110	6	60	36	3	32	6	26	361	31	[illegible]	[illegible]
2	0	0	0	0	1	0	0	2	0	0	2
116	101	230	18	35	57	11	51	[illegible]	[illegible]	70	[illegible]
1	1	1	3	1	0	1	12	24	0	1	20
0	0	0	0	1	0	0	0	0	[illegible]	0	[illegible]
98	9	25	20	2	7	0	21	107	73	41	58
17	7	8	7	0	0	0	0	73	[illegible]	[illegible]	[illegible]
9	0	0	2	1	1	0	1	7	0	3	6
10	0	0	1	0	5	0	1	[illegible]	[illegible]	[illegible]	[illegible]
38	2	8	0	4	2	0	8	107	26	4	17
4	0	0	0	0	2	0	1	[illegible]	[illegible]	1	[illegible]
1	0	3	2	0	0	0	0	0	0	2	2
65	36	61	25	0	[illegible]	0	16	277	[illegible]	[illegible]	[illegible]
0	0	0	0	0	1	0	0	0	0	0	0
0	0	[illegible]	0	0	0	[illegible]	0	0	[illegible]	[illegible]	[illegible]
0	0	0	0	0	0	0	0	0	0	0	0
[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	0	[illegible]
1	0	1	2	0	0	0	0	1	0	1	2
0	0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
2	0	0	0	0	0	0	0	2	0	0	0

2000

2000 B.C. Selected Diseases Case Reports by Health Authorities

	BC Total	East Kootenay	West Kootenay-Boundary	North Okanagan	South Okanagan Similk	Thompson	Fraser Valley	South Fraser Valley
2000 Population	4,067,179	82,552	82,758	119,250	233,133	137,639	243,175	575,919
AIDS	85	0	0	1	2	0	1	6
Amebiasis	287	0	9	0	0	3	14	47
Campylobacteriosis	2553	28	32	37	88	48	128	390
Chlamydia	6193	61	81	138	369	293	172	517
Cryptosporidiosis	167	1	1	1	4	23	20	30
Cyclosporidiosis	7	0	0	0	0	0	1	2
Verotoxigenic *E. coli*	163	4	3	8	21	6	9	21
Giardiasis	926	18	20	18	35	27	62	114
Gonorrhea	724	0	1	5	19	12	11	56
***Haemophilus influenza* type b (invasive)**	7	0	1	0	0	0	0	2
Hepatitis A	136	12	4	0	4	2	0	11
Hepatitis B: Acute	112	5	0	1	3	4	3	12
Hepatitis B: Undetermined	1726	1	5	0	2	0	9	37
Hepatitis B: Chronic	1015	2	5	1	4	15	47	221
Hepatitis C	4302	67	93	120	197	176	349	461
Hepatitis E	6	0	0	0	0	0	0	2
HIV	413	1	1	5	13	6	22	19
Influenza	218	6	9	1	10	9	19	23
Malaria	33	0	1	2	2	0	1	3
Measles	42	0	0	0	0	0	0	2
Meningococcal (Invasive)	24	0	0	1	1	1	3	3
Methicillin Resistant *Staphylococcus aureus*	1041	2	9	26	20	12	52	160
Mumps	17	0	1	0	0	0	1	8
Pertussis	1806	39	99	22	227	157	20	212
Pneumococcal (Invasive)	93	1	0	7	0	13	1	6
Rubella	2	0	0	0	0	0	0	1
Salmonellosis	684	7	8	16	23	9	45	115
Shigellosis	215	1	2	1	5	4	8	32
Streptococcal Group A	57	1	1	2	0	4	5	14
Syphilis	96	0	0	0	2	1	1	7
Tuberculosis	290	1	1	1	5	2	14	50
Vancomycin Resistant Enterococci	46	0	0	1	2	0	1	0
Vibrio parahaemolyticus	14	0	0	2	0	0	0	2
Yersiniosis	1018	13	11	16	13	2	8	107
Less Common Diseases								
Botulism	1	0	0	0	0	0	0	0
Hantavirus	0	0	0	0	0	0	0	0
Leprosy	1	0	0	0	0	0	0	1
Listeriosis	6	0	1	0	0	0	0	0
Lyme Disease	12	1	0	0	1	0	1	1
Trichinosis	0	0	0	0	0	0	0	0
Typhoid	10	0	0	1	2	0	1	2

Simon Fraser	Coast Garibaldi	Cent Van Island	Upper Island	Cariboo	North West	Peace Liard	North Interior	Vancouver	Richmond	North Shore	Capital Region
517,594	80,448	245,279	122,809	77,188	91,959	66,254	134,081	575,744	166,118	180,432	334,847
5	2	2	1	0	1	0	0	39	2	3	7
23	1	0	1	0	0	0	0	154	5	9	21
341	47	157	74	0	26	1	33	503	180	155	285
537	129	387	236	104	197	108	423	1639	128	124	529
15	2	6	3	0	1	0	1	38	5	9	7
0	0	0	0	0	0	0	0	0	0	0	4
25	4	4	6	0	4	0	9	16	2	4	17
98	24	41	38	11	26	0	21	241	16	41	75
83	10	14	11	1	12	2	2	428	6	26	16
0	0	0	0	1	1	0	0	0	2	0	0
18	11	3	1	26	2	0	1	17	10	2	12
14	3	5	10	1	3	0	2	36	0	1	9
38	5	3	0	0	6	0	0	1118	390	71	41
533	10	16	6	4	12	3	68	8	5	23	32
555	63	274	139	24	67	45	129	1022	82	95	344
2	0	0	0	0	0	0	0	1	0	0	1
45	2	13	3	2	1	2	3	242	0	6	27
45	8	4	3	5	3	1	5	22	11	3	31
6	2	1	0	0	1	0	3	10	0	1	0
0	0	0	0	0	0	38	0	2	0	0	0
2	1	1	0	1	1	1	0	3	3	0	2
110	6	60	36	3	32	6	26	361	31	38	51
2	0	0	0	0	1	0	0	2	0	0	2
116	101	230	16	35	57	11	51	75	23	70	245
1	1	1	3	1	0	1	12	24	0	1	20
0	0	0	0	1	0	0	0	0	0	0	0
98	9	25	20	2	7	0	21	107	73	41	58
17	7	8	7	0	0	0	0	73	9	16	25
9	0	0	2	1	1	0	1	7	0	3	6
10	0	0	1	0	3	0	1	65	2	3	0
38	2	8	0	4	2	0	8	107	26	4	17
4	0	0	0	0	2	0	1	32	0	1	2
1	0	3	2	0	0	0	0	0	0	2	2
65	36	61	25	0	4	0	10	277	88	145	137
0	0	0	0	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	1	1	0	1
1	0	1	2	0	0	0	0	1	0	1	2
0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	2	0	0	0

2000 B.C. Selected Disease Rates by Health Authorities

	BC Total	East Kootenay	West Kootenay-Boundary	North Okanagan	South Okanagan Similk	Thompson	Fraser Valley	South Fraser Valley
2000 Population	4,067,179	82,552	82,758	119,250	233,133	137,639	243,175	575,919
AIDS	2.1	0.0	0.0	0.8	0.9	0.0	0.4	1.0
Amebiasis	7.1	0.0	10.9	0.0	0.0	2.2	5.8	8.2
Campylobacteriosis	62.8	33.9	38.7	31.0	37.7	34.9	52.6	67.7
Chlamydia	152.3	73.9	97.9	115.7	158.3	212.9	70.7	89.8
Cryptosporidiosis	4.1	1.2	1.2	0.8	1.7	16.7	8.2	5.2
Cyclosporidiosis	0.2	0.0	0.0	0.0	0.0	0.0	0.4	0.3
Verotoxigenic *E. coli*	4.0	4.8	3.6	6.7	9.0	4.4	3.7	3.6
Giardiasis	22.8	21.8	24.2	15.1	15.0	19.6	25.5	19.8
Gonorrhea	17.8	0.0	1.2	4.2	8.1	8.7	4.5	9.7
Haemophilus influenza type b (invasive)	0.2	0.0	1.2	0.0	0.0	0.0	0.0	0.3
Hepatitis A	3.3	14.5	4.8	0.0	1.7	1.5	0.0	1.9
Hepatitis B: Acute	2.8	6.1	0.0	0.8	1.3	2.9	1.2	2.1
Hepatitis B: Undetermined	42.4	1.2	6.0	0.0	0.9	0.0	3.7	6.4
Hepatitis B: Chronic	25.0	2.4	6.0	0.8	1.7	10.9	19.3	38.4
Hepatitis C	105.8	81.2	112.4	100.6	84.5	127.9	143.5	80.0
Hepatitis E	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
HIV	10.2	1.2	1.2	4.2	5.6	4.4	9.0	3.3
Influenza	5.4	7.3	10.9	0.8	4.3	6.5	7.8	4.0
Malaria	0.8	0.0	1.2	1.7	0.9	0.0	0.4	0.5
Measles	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Meningococcal (Invasive)	0.6	0.0	0.0	0.8	0.4	0.7	1.2	0.5
Methicillin Resistant *Staphylococcus aureus*	25.6	2.4	10.9	21.8	8.6	8.7	21.4	27.8
Mumps	0.4	0.0	1.2	0.0	0.0	0.0	0.4	1.4
Pertussis	44.4	47.2	119.6	18.4	97.4	114.1	8.2	36.8
Pneumococcal (Invasive)	2.3	1.2	0.0	5.9	0.0	9.4	0.4	1.0
Rubella	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Salmonellosis	16.8	8.5	9.7	13.4	9.9	6.5	18.5	20.0
Shigellosis	5.3	1.2	2.4	0.8	2.1	2.9	3.3	5.6
Streptococcal Group A	1.4	1.2	1.2	1.7	0.0	2.9	2.1	2.4
Syphilis	2.4	0.0	0.0	0.0	0.9	0.7	0.4	1.2
Tuberculosis	7.1	1.2	1.2	0.8	2.1	1.5	5.8	8.7
Vancomycin Resistant Enterococci	1.1	0.0	0.0	0.8	0.9	0.0	0.4	0.0
Vibrio parahaemolyticus	0.3	0.0	0.0	1.7	0.0	0.0	0.0	0.3
Yersiniosis	25.0	15.7	13.3	13.4	5.6	1.5	3.3	18.6
Less Common Diseases								
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hantavirus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leprosy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Listeriosis	0.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Lyme Disease	0.3	1.2	0.0	0.0	0.4	0.0	0.4	0.2
Trichinosis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Typhoid	0.2	0.0	0.0	0.8	0.9	0.0	0.4	0.3

Simon Fraser	Coast Garibaldi	Cent Van Island	Upper Island	Cariboo	North West	Peace Liard	North Interior	Vancouver	Richmond	North Shore	Capital Region
517,594	80,448	245,279	122,809	77,188	91,959	66,254	134,081	575,744	166,118	180,432	334,847
1.0	2.5	0.8	0.8	0.0	1.1	0.0	0.0	6.8	1.2	1.7	2.1
4.4	1.2	0.0	0.8	0.0	0.0	0.0	0.0	26.7	3.0	5.0	6.3
65.9	58.4	64.0	60.3	0.0	28.3	1.5	24.6	87.4	108.4	85.9	85.1
103.7	160.4	157.8	192.2	134.7	214.2	163.0	315.5	284.7	77.1	68.7	158.0
2.9	2.5	2.4	2.4	0.0	1.1	0.0	0.7	6.6	3.0	5.0	2.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
4.8	5.0	1.6	4.9	0.0	4.3	0.0	6.7	2.8	1.2	2.2	5.1
18.9	29.8	16.7	30.9	14.3	28.3	0.0	15.7	41.9	9.6	22.7	22.4
16.0	12.4	5.7	9.0	1.3	13.0	3.0	1.5	74.3	3.6	14.4	4.8
0.0	0.0	0.0	0.0	1.3	1.1	0.0	0.0	0.0	1.2	0.0	0.0
3.5	13.7	1.2	0.8	33.7	2.2	0.0	0.7	3.0	6.0	1.1	3.6
2.7	3.7	2.0	8.1	1.3	3.3	0.0	1.5	6.3	0.0	0.6	2.7
7.3	6.2	1.2	0.0	0.0	6.5	0.0	0.0	194.2	234.8	39.4	12.2
103.0	12.4	6.5	4.9	5.2	13.0	4.5	50.7	1.4	3.0	12.7	9.6
107.2	78.3	111.7	113.2	31.1	72.9	67.9	96.2	177.5	49.4	52.7	102.7
0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3
8.7	2.5	5.3	2.4	2.6	1.1	3.0	2.2	42.0	0.0	3.3	8.1
8.7	9.9	1.6	2.4	6.5	3.3	1.5	3.7	3.8	6.6	1.7	9.3
1.2	2.5	0.4	0.0	0.0	1.1	0.0	2.2	1.7	0.0	0.6	0.0
0.0	0.0	0.0	0.0	0.0	0.0	57.4	0.0	0.3	0.0	0.0	0.0
0.4	1.2	0.4	0.0	1.3	1.1	1.5	0.0	0.5	1.8	0.0	0.6
21.3	7.5	24.5	29.3	3.9	34.8	9.1	19.4	62.7	18.7	21.1	15.2
0.4	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.6
22.4	125.5	93.8	13.0	45.3	62.0	16.6	38.0	13.0	13.8	38.8	73.2
0.2	1.2	0.4	2.4	1.3	0.0	1.5	8.9	4.2	0.0	0.6	6.0
0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.9	11.2	10.2	16.3	2.6	7.6	0.0	15.7	18.6	43.9	22.7	17.3
3.3	8.7	3.3	5.7	0.0	0.0	0.0	0.0	12.7	5.4	8.9	7.5
1.7	0.0	0.0	1.6	1.3	1.1	0.0	0.7	1.2	0.0	1.7	1.8
1.9	0.0	0.0	0.8	0.0	3.3	0.0	0.7	11.3	1.2	1.7	0.0
7.3	2.5	3.3	0.0	5.2	2.2	0.0	6.0	18.6	15.7	2.2	5.1
0.8	0.0	0.0	0.0	0.0	2.2	0.0	0.7	5.6	0.0	0.6	0.6
0.2	0.0	1.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.6
12.6	44.7	24.9	20.4	0.0	4.3	0.0	7.5	48.1	53.0	80.4	40.9
0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.0	0.3
0.2	0.0	0.4	1.6	0.0	0.0	0.0	0.0	0.2	0.0	0.6	0.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0

2000 B.C. Selected Disease Rates by Health Authorities

	B.C. Total	East Kootenay	West Kootenay-Boundary	North Okanagan	South Okanagan Similkameen	Thompson	Fraser Valley	South Fraser Valley
2000 Population	4,067,179	82,552	82,758	119,250	233,133	137,639	243,175	575,919
AIDS	2.1	0.0	0.0	0.8	0.9	0.0	0.4	1.0
Amebiasis	7.1	0.0	10.9	0.0	0.0	2.2	5.8	8.2
Campylobacteriosis	62.8	33.9	38.7	31.0	37.7	34.9	52.6	67.7
Chlamydia	152.3	73.9	97.9	115.7	158.3	212.9	70.7	89.8
Cryptosporidiosis	4.1	1.2	1.2	0.8	1.7	16.7	8.2	5.2
Cyclosporidiosis	0.2	0.0	0.0	0.0	0.0	0.0	0.4	0.3
Verotoxigenic *E. coli*	4.0	4.8	3.6	6.7	9.0	4.4	3.7	3.6
Giardiasis	22.8	21.8	24.2	15.1	15.0	19.6	25.5	19.8
Gonorrhea	17.8	0.0	1.2	4.2	8.1	8.7	4.5	9.7
***Haemophilus influenza* type b (Invasive)**	0.2	0.0	1.2	0.0	0.0	0.0	0.0	0.3
Hepatitis A	3.3	14.5	4.8	0.0	1.7	1.5	0.0	1.9
Hepatitis B: Acute	2.8	6.1	0.0	0.8	1.3	2.9	1.2	2.1
Hepatitis B: Undetermined	42.4	1.2	6.0	0.0	0.9	0.0	3.7	6.4
Hepatitis B: Chronic	25.0	2.4	6.0	0.8	1.7	10.9	19.3	38.4
Hepatitis C	105.8	81.2	112.4	100.6	84.5	127.9	143.5	80.0
Hepatitis E	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
HIV	10.2	1.2	1.2	4.2	5.6	4.4	9.0	3.3
Influenza	5.4	7.3	10.9	0.8	4.3	6.5	7.8	4.0
Malaria	0.8	0.0	1.2	1.7	0.9	0.0	0.4	0.5
Measles	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Meningococcal (Invasive)	0.6	0.0	0.0	0.8	0.4	0.7	1.2	0.5
Methicillin Resistant *Staphylococcus aureus*	25.6	2.4	10.9	21.8	8.6	8.7	21.4	27.8
Mumps	0.4	0.0	1.2	0.0	0.0	0.0	0.4	1.4
Pertussis	44.4	47.2	119.6	18.4	97.4	114.1	8.2	36.8
Pneumococcal (Invasive)	2.3	1.2	0.0	5.9	0.0	9.4	0.4	1.0
Rubella	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Salmonellosis	16.8	8.5	9.7	13.4	9.9	6.5	18.5	20.0
Shigellosis	5.3	1.2	2.4	0.8	2.1	2.9	3.3	5.6
Streptococcal Group A	1.4	1.2	1.2	1.7	0.0	2.9	2.1	2.4
Syphilis	2.4	0.0	0.0	0.0	0.9	0.7	0.4	1.2
Tuberculosis	7.1	1.2	1.2	0.8	2.1	1.5	5.8	8.7
Vancomycin Resistant Enterococci	1.1	0.0	0.0	0.8	0.9	0.0	[illegible]	0.0
Vibrio parahaemolyticus	0.3	0.0	0.0	1.7	0.0	0.0	0.0	0.3
Yersiniosis	[illegible]	15.7	13.3	13.4	5.6	1.5	3.1	18.6
Less Common Diseases								
Botulism	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hantavirus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leprosy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Listeriosis	0.1	0.0	1.2	0.0	0.0	0.0	[illegible]	[illegible]
Lyme Disease	0.3	1.2	0.0	0.0	0.4	0.0	0.4	0.2
Trichinosis	[illegible]	0.0	0.0	[illegible]	0.0	0.0	[illegible]	[illegible]
Typhoid	0.2	0.0	0.0	0.8	0.9	0.0	0.4	0.3

Simon Fraser	Coast Garibaldi	Cent Van Island	Upper Island	Cariboo	North West	Peace Liard	North Interior	Vancouver	Richmond	North Shore	Capital Region
517,594	80,448	245,279	122,809	77,188	91,959	66,254	134,081	575,744	166,118	180,432	334,847
1.0	2.5	0.8	0.8	0.0	1.1	0.0	0.0	6.8	1.2	1.7	2.1
4.4	1.2	0.0	0.8	0.0	0.0	0.0	0.0	26.7	3.0	5.0	6.3
65.9	58.4	64.0	60.3	0.0	28.3	1.5	24.6	87.4	108.4	85.9	85.1
103.7	160.4	157.8	192.2	134.7	214.2	163.0	315.5	284.7	77.1	68.7	158.0
2.9	2.5	2.4	2.4	0.0	1.1	0.0	0.7	6.6	3.0	5.0	2.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
4.8	5.0	1.6	4.9	0.0	4.3	0.0	6.7	2.8	1.2	2.2	5.1
18.9	29.8	16.7	30.9	14.3	28.3	0.0	15.7	41.9	9.6	22.7	22.4
16.0	12.4	5.7	9.0	1.3	13.0	3.0	1.5	74.3	3.6	14.4	4.8
0.0	0.0	0.0	0.0	1.3	1.1	0.0	0.0	0.0	1.2	0.0	0.0
3.5	13.7	1.2	0.8	33.7	2.2	0.0	0.7	3.0	6.0	1.1	3.6
2.7	3.7	2.0	8.1	1.3	3.3	0.0	1.5	6.3	0.0	0.6	2.7
7.3	6.2	1.2	0.0	0.0	6.5	0.0	0.0	194.2	234.8	39.4	12.2
103.0	12.4	6.5	4.9	5.2	13.0	4.5	50.7	1.4	3.0	12.7	9.6
107.2	78.3	111.7	113.2	31.1	72.9	67.9	96.2	177.5	49.4	52.7	102.7
0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3
8.7	2.5	5.3	2.4	2.6	1.1	3.0	2.2	42.0	0.0	3.3	8.1
8.7	9.9	1.6	2.4	6.5	3.3	1.5	3.7	3.8	6.6	1.7	9.3
1.2	2.5	0.4	0.0	0.0	1.1	0.0	2.2	1.7	0.0	0.6	0.0
0.0	0.0	0.0	0.0	0.0	0.0	57.4	0.0	0.3	0.0	0.0	0.0
0.4	1.2	0.4	0.0	1.3	1.1	1.5	0.0	0.5	1.8	0.0	0.6
21.3	7.5	24.5	29.3	3.9	34.8	9.1	19.4	62.7	18.7	21.1	15.2
0.4	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.3	0.0	0.0	0.6
22.4	125.5	93.8	13.0	45.3	62.0	16.6	38.0	13.0	13.8	38.8	73.2
0.2	1.2	0.4	2.4	1.3	0.0	1.5	8.9	4.2	0.0	0.6	6.0
0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18.9	11.2	10.2	16.3	2.6	7.6	0.0	15.7	18.6	43.9	22.7	17.3
3.3	8.7	3.3	5.7	0.0	0.0	0.0	0.0	12.7	5.4	8.9	7.5
1.7	0.0	0.0	1.6	1.3	1.1	0.0	0.7	1.2	0.0	1.7	1.8
1.9	0.0	0.0	0.8	0.0	3.3	0.0	0.7	11.3	1.2	1.7	0.0
7.3	2.5	3.3	0.0	5.2	2.2	0.0	6.0	18.6	15.7	2.2	5.1
0.8	0.0	0.0	0.0	0.0	2.2	0.0	0.7	5.6	0.0	0.6	0.6
0.2	0.0	1.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.6
12.6	44.7	24.9	20.4	0.0	4.3	0.0	7.5	48.1	53.0	80.4	40.9
0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.2	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3
0.2	0.0	0.4	1.6	0.0	0.0	0.0	0.0	0.2	0.0	0.6	0.6
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0

Sources

1) Cases are reported through the Public Health Information System (PHIS) collected from all health regions in British Columbia.

2) Population projections are from Health Data Warehouse – Ministry of Health and Ministry Responsible for Seniors. HDW release date: July 2000.

3) National rates are provided by Health Canada – Population and Public Health Branch.

4) Data for influenza, invasive meningococcal disease, and invasive group A streptococcal disease are collected through enhanced surveillance.

5) Mortality rates for infectious diseases are provided by BC Vital Statistics.

6) Health Region Boundaries are from BC STATS, Ministry of Finance and Corporate Relations.

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